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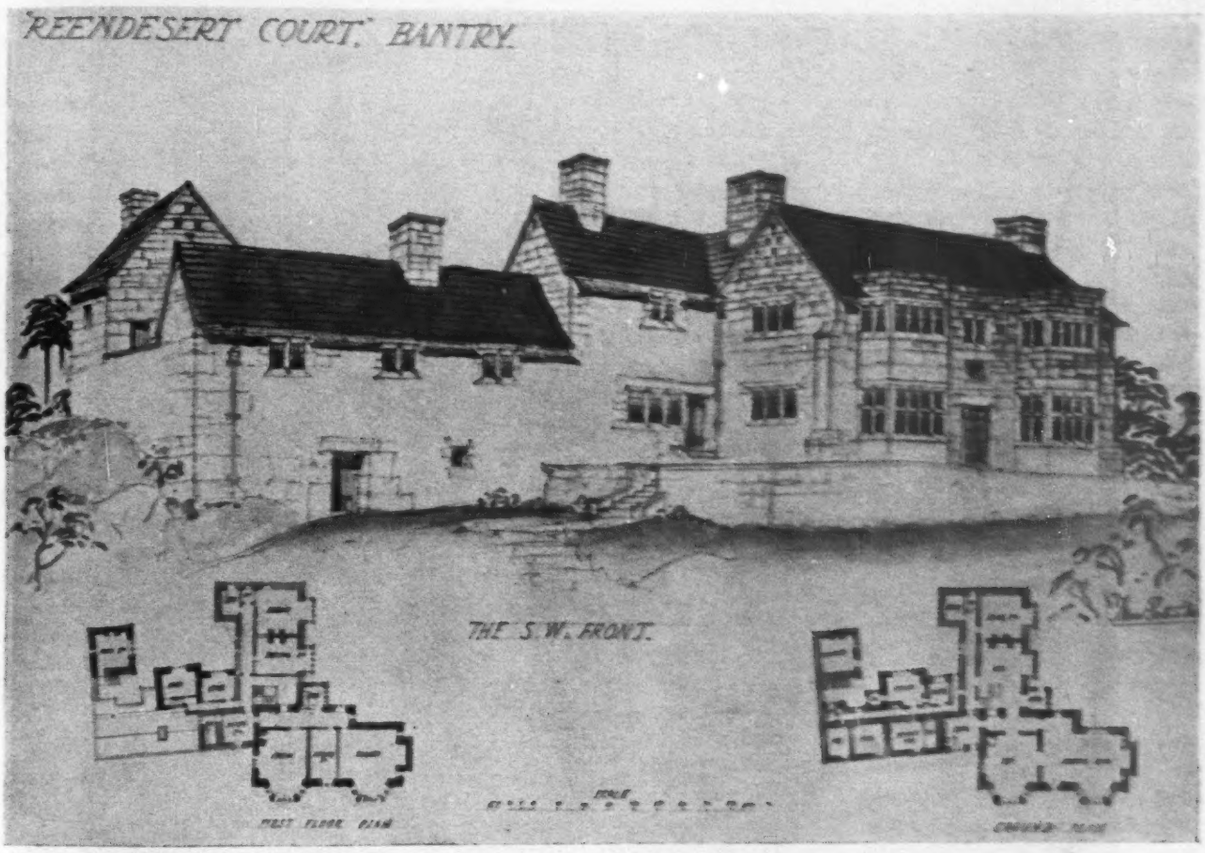


R.A. Exhibition, 1933.

"Reendesert Court," Bantry Bay, near Snave Bridge, Irish Free State.

Mr. Briant Poulter, F.R.I.B.A., Architect.

MEETINGS

Monday-Thursday, *July* 10-13.

Institute of Quarrying. Fifteenth Annual Conference. At Leamington Spa.

Monday-Friday, *July* 10-14.

Society of Chemical Industry. Fifty-second Annual Meeting. At Newcastle-upon-Tyne.

Friday, *July* 14.

Architectural Association. Annual Prize Distribution by the Rt. Hon. the Earl of Crawford and Balcarres. 3.30 p.m.

Saturday-Saturday, *July* 15-29.

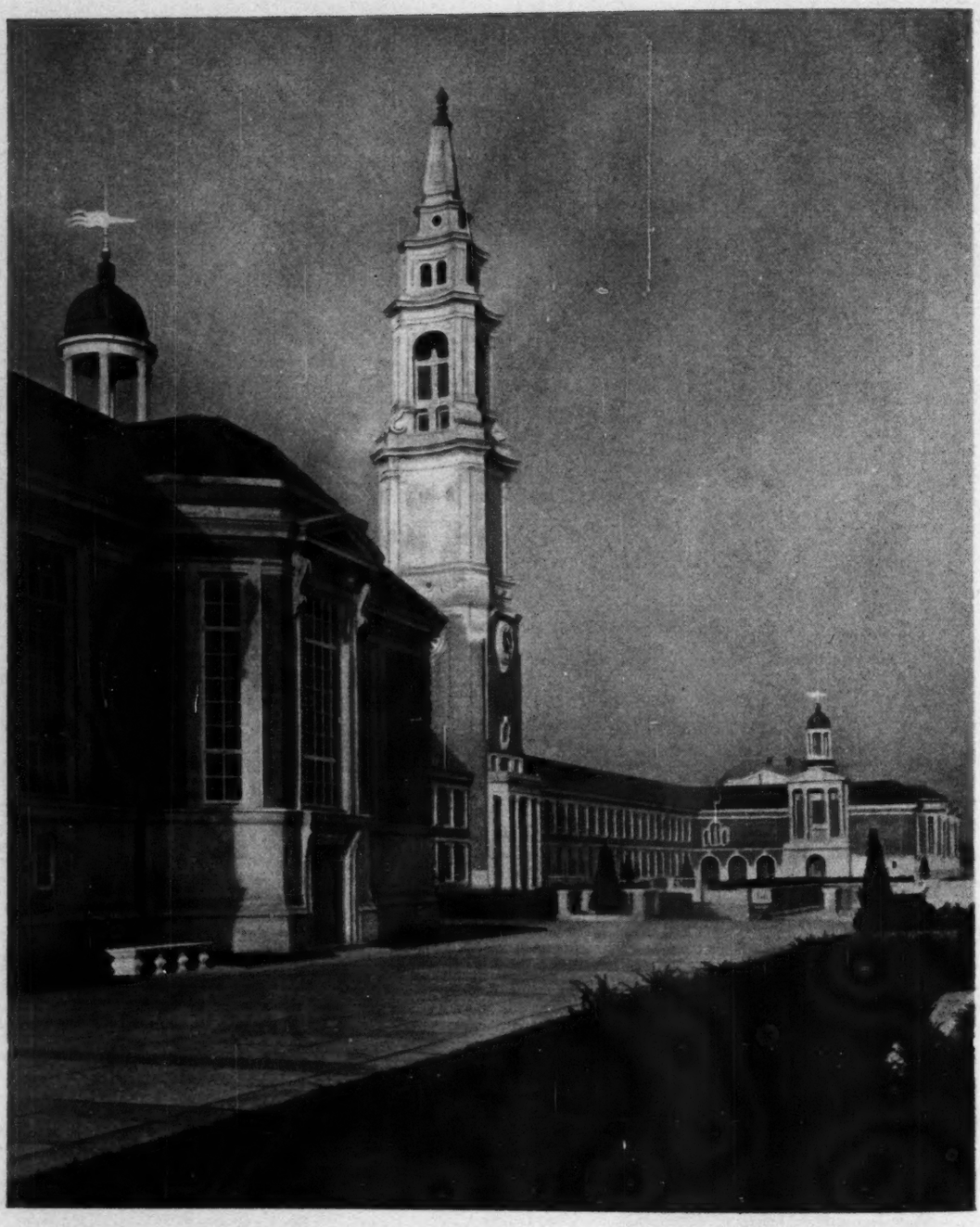
Architectural Association. Exhibition of the Leverhulme Scholarships. At 34-36, Bedford-square, W.C.1. 10 a.m. to 6 p.m.

Saturday, *July* 22.

St. Paul's Ecclesiological Society. Visit to St. Barnabas' Church, Westbourne-avenue, and St. Saviour's Church, Middle Park-avenue, Eltham. Meet at St. Barnabas' Church, 2.30 p.m.

Monday-Sunday, *September* 11-17.

Town and Country Planning Summer School. Conference. At Digswell House, Welwyn.



Royal Hospital School, Holbrook, Suffolk : View from Dining Hall to Gymnasium.

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., Architects.

CAMBRIDGE AND THE CONFERENCE

THE selection of Cambridge as the meeting-place for this year's Conference of British architects was a happy choice for several reasons. It is a city of inspiration, set in the midst of a countryside whose quiet beauty is still unspoiled, where many stately English homes nestle among the undulations of the ground, set about with noble trees and avenues, lakes and streams, and pleasant gardens.

Cambridge itself is too well known to architects to need description, but those who took part in the proceedings of the Conference were impressed with the fact that it is no dead city of ancient learning, but a place where architectural history is still being made and where the talents of a large group of the best-known architects of our day are enlisted by the University and the various colleges to solve problems of modern scientific development in directions which are extraordinarily varied, to solve, also, the problems of the increased accommodation required for men, pictures and books, which mark the healthy growth of this famous University and reflect the needs and outlook of the present day. Modern and progressive, but not "modernist" or divorced from the splendid achievements of the past, the spirit of the place still dominates its architectural character, and gives harmony with diversity of expression in a remarkable degree. To mention all those who have thus contributed to this practical museum of modern architecture would take us beyond the limits of this page (a fairly comprehensive list was given in our issue for June 16), but to mention even the more notable post-war buildings would form an impressive list. In the town itself more building is in progress, and here, again, it is heartening to note that architects who know their job have been employed, while in the near future the Guildhall is to be entirely rebuilt to the plans of Mr. Cowles-Voysey.

Thus, whether by happy accident or by design, the choice of Cambridge as the venue for this year's Conference acted as a tonic (in these days of depression and uncertainty) to the architects and their friends who gathered there from all parts of the country and some of the distant British Dominions to exchange views and collect ideas, to revive old friendships and make new ones, and spend some pleasant hours in visits to places of architectural interest.

The main topic of discussion was suggested by the President in his excellent inaugural address, and concerned the various ways in which the character of the smaller houses might be improved without adding to the cost. Here opinions were divided, more especially on the subject of the special scale of fees to be charged for the preparation of plans for builders and the possibility of such designs being satisfactorily carried out without supervision. But there was general agreement that the outgoing President of the R.I.B.A. had not only left his mark on the affairs of the Institute, but had contributed towards that increased use of his services which the architect, by his special training and experience, can offer towards the solution of the two urgent problems of the slums and the housing shortage. It would probably be correct to say that the large attendance at the Conference was, in no small measure, a tribute to the President, Sir Raymond Unwin, who has endeared himself to a wide circle of architects by his natural modesty, and his sincere eloquence in dealing with these two great national problems, for which his previous experience has given him special qualifications and unrivalled knowledge.

But although these questions were the official topics, many others were informally debated with all the energy that architects display in congenial surroundings, often in striking contrast to other one-sided discussions which result in strange decisions in a council room. One of these topics was the revised scale of charges and the proposal that the fees of consultants and specialists when engaged by the architect should be paid for by him: here the general opinion seemed to be favourable, in the case of large and costly buildings, to an endeavour to meet the client and to guard against the danger, which (although not generally appreciated) is a real one, that a time may come when the constructor or structural engineer may take up the function of the architect, and (by means of the "all in" price) persuade the client that he is getting all that is required in the way of architectural advice without extra cost. This is an aspect of the situation, more especially in the case of industrial and commercial buildings, which does not seem to have received sufficient consideration, and it may be, as some architects believe, that the solution lies in the adoption of the organisation which is to be found in the United States, or the less pleasant alternative to be found in some Continental countries, where the architect has the contractor as his client instead of under his supervision.

Another fruitful subject of discussion was the old question of whether an architect should take out his own quantities, and whether when he does so the fees should be included in the "bill" or be paid direct by the client. Here opinion between London architects and those in provincial centres is sharply divided, and no general agreement seems possible; but opinions expressed seemed to indicate a general acceptance of the view that when quantities were taken out by the architect himself it was desirable that the client should be informed and that the additional charge should be included in the architect's account for fees, rather than added to the "bill" itself.

Among other topics we heard the usual grumbles about the "official" architect, the incompetent assessor and the apathy of the Council of the R.I.B.A. and its various Committees to the welfare of the ordinary architect, but no reference to the apathy of the ordinary member of the Institute when the annual election gives him an opportunity of showing his dislike to any policy by nominating or voting for new men. We must, therefore, conclude that such grumblers are merely exercising the Englishman's time-honoured custom of grumbling without having any constructive suggestions to put forward as the basis for an alternative policy.

To sum up these various impressions of the Conference, we would say that it showed a mood of subdued optimism and a confident hope that better times were in store for the country as a whole and architects in particular.

NOTES

A New Plan for London.

UNDER this title *The Times* published an article a few days ago. We thought, as we read it, that we were seeing the initial stages of a conscious, deliberate conception of the art of building which may remodel and guide the future of our architecture and the development of our cities. To those who regard architecture as a slow, traditional development, to be traced historically, the new proposals have as much significance, almost, as the discovery of a new method of construction. The proposals are at once an immediate breaking of bonds and a new technique of architectural design. Our buildings are to be modelled from the outside, and architecture is to be turned, as it were, inside out. The interesting principle outlined by the British Steelwork Association in a memorandum which we summarise this week is the proposal to bargain for additional height in buildings within an angle of 75 deg. in return for land given up for street widening—in short, the exchange of frontage land for building height. To many of our readers, the principle will no doubt appeal, and will seem to be fair both to the building owner and the citizen in the street, especially if considered in relation to our present system of land tenure.

Traffic Congestion.

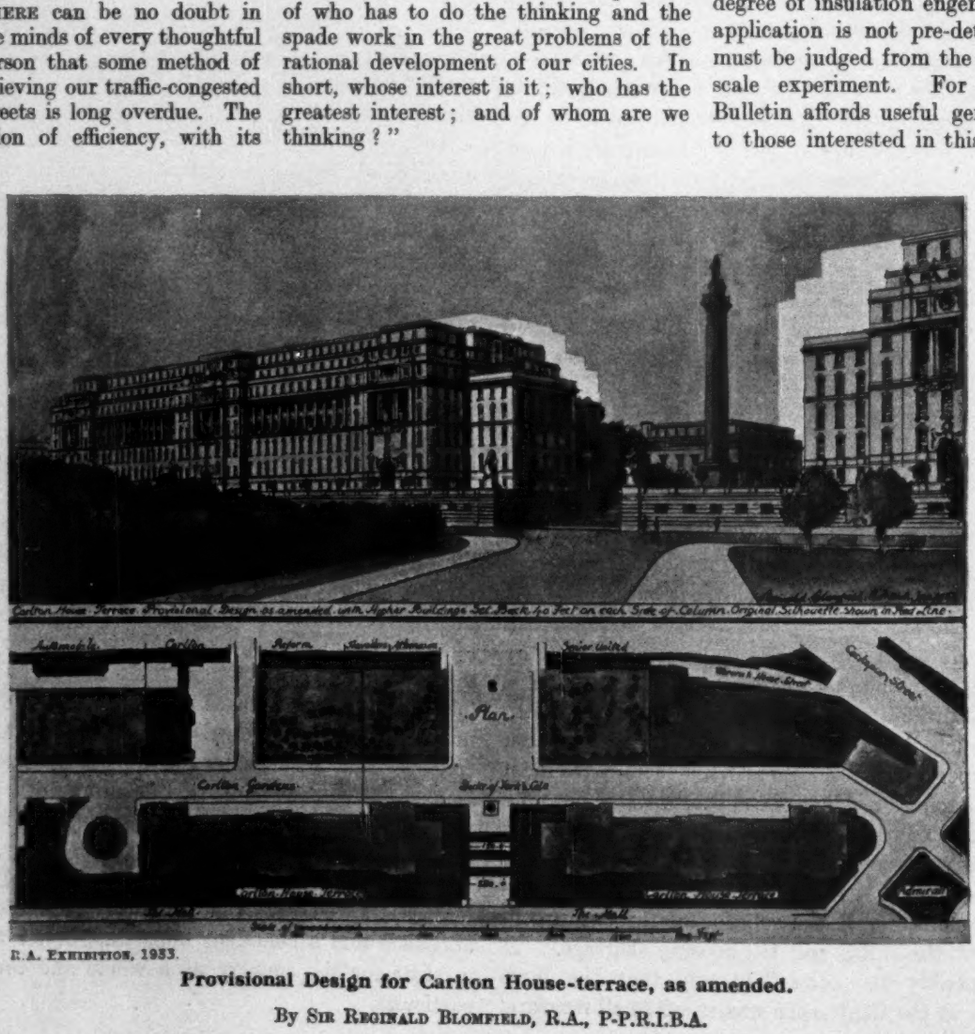
THERE can be no doubt in the minds of every thoughtful person that some method of relieving our traffic-congested streets is long overdue. The whole conception of efficiency, with its trifling time-saving devices down to its clipped jargon of speech, becomes a joke when the bulk of our time is lost in the streets in getting from place to place. No doubt some mathematician will work out for us the rate of acceleration of traffic in relation to the increased width of street, and also the extra number of people accommodated in our taller buildings in relation to the frontage land given up for street widening. In these proposals for heightening buildings and widening streets, is there an assurance that the two developments will not simply cancel out—and traffic congestion remain ?

The Impulse.

A CORRESPONDENT writing to us says that it is a significant point to him that a method or form of building altering the whole conception of street architecture and the appearance of a city should emanate from a body of people interested in a constructional material. "Nothing wrong in that," he says, "but some day, many years hence, it will be an interesting point to those who lecture and write upon architectural history—its expression from materials, construction and social conditions. It appears that someone had to solve the problem for—or in spite of—the authorities responsible for the control and development of our cities. It raises the question of who has to do the thinking and the spade work in the great problems of the rational development of our cities. In short, whose interest is it ; who has the greatest interest ; and of whom are we thinking ? "

Reduction of Noise in Buildings.

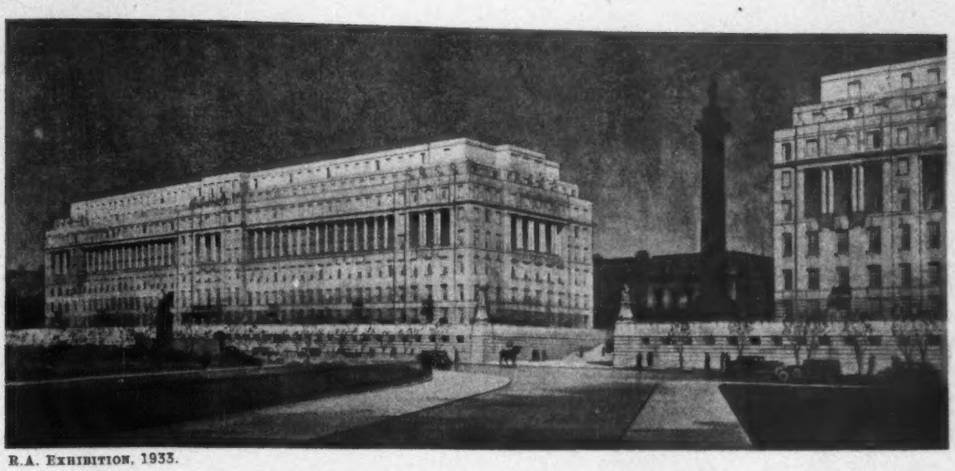
WE summarise elsewhere in this issue a Bulletin on "The Reduction of Noise in Buildings," which has just been issued by the Department of Scientific and Industrial Research. The problem of reducing noise and disturbance in a building due to transmitted sound is one of increasing importance. It is, moreover, a difficult problem to solve even when tackled, as it certainly should be, at the design stage and before the foundations of a building are laid. As Dr. Stradling points out in a prefatory note, it may be said, in general, that the more massive the construction is, the less is the volume of sound transmitted through it. But in modern frame construction the use of massive separating structures between interior and exterior, between rooms and between stories, is quite at variance with the economic considerations which make the framed structure a rational form of construction for multi-storied buildings. The designer, then, is often faced with the necessity of obtaining, by the application of other principles governing sound transmission, the maximum insulation possible with the lighter forms of separating structure. Herein lies the difficulty, because, apart from the mass-transmission relationship, the principles cannot be stated in specific terms. The actual degree of insulation engendered by their application is not pre-determinable ; it must be judged from the results of full-scale experiment. For all that, the Bulletin affords useful general guidance to those interested in this problem.


Carlton House Terrace. Provisional Design as amended, with Higher Buildings Set Back 40 Feet on each Side of Column. Original Silhouette shown in Red Line.
Plan.
Carlton Gardens

R.A. EXHIBITION, 1933.

Provisional Design for Carlton House-terrace, as amended.

By SIR REGINALD BLOMFIELD, R.A., P-P.R.I.B.A.



R.A. Exhibition, 1933.

Provisional Design for Carlton House-terrace.

By Sir Reginald Blomfield, R.A., P-P.R.I.B.A.

Value of Collected Data. The value to the designer of collected test data for different materials and construction, accompanied by notes giving an outline in non-scientific language of the numerous factors which make for sound insulation, is at once apparent. An attempt to provide this information is made in this Bulletin. Unfortunately test data for British materials and types of construction are (says Dr. Stradling) in general somewhat sparse, and present variations in test methods tend to produce anomalous results. However, with a growing appreciation in this country of acoustic requirements in modern building, and with development of testing facilities, it is to be hoped that before long the designer will have ready to hand a much more complete and reliable collection of sound reduction data than is available at the present time.

Sky Advertising. At the recent meeting of the Scapa Society it was considered that sky writing, the new form of advertising proposed, was an "unnecessary" addition to the many forms that already exist, and should either be prohibited entirely or at the least very severely restricted. We could have wished that the Society had spoken with a less uncertain voice. To say only that it is unnecessary is to ignore the gravity of this proposal. In regard to the promotors of the scheme and the powerful commercial interests involved, it would be less than just to attribute any intention to disregard deliberately the limits of what is permissible. But in the code of what is permissible there are some things we may not do. The reverence we owe to Nature and to what is above us, which in this case happens also to be the sky, should surely make impossible this proposed outrage to our inheritance of undisturbed enjoyment, and it is much to be hoped that Parliament will not accept the conclusions of the Select Committee of the House of Commons, which were most unsatisfactory and revealed a spirit of compromise and fear to offend the powerful interests concerned. It is said that we cannot raise people above the general level of the race, and that a nation gets the government it deserves, but those who argue thus are often ignorant of what that level is, and of the deep hostility felt to the proposal by great numbers of people, and their regret that a Government Committee should so little interpret the strength of their objections to handing over the sky to be scrawled over by advertisements; and we are glad to hear of efforts to marshal public opinion against a project which all good taste condemns.

Unemployment in the Middle Classes. The degree of distress in the ranks of architects and architectural assistants, due to the present condition of trade, should alone invite the sympathetic consideration of architects to the activities of the newly-formed British Executive Employment Society, of 133, Oxford-street, W.1. The "black-coated" worker, when hard times come, is generally in a position as bad as, if not worse than, that of the labourer, for when his savings have gone nothing remains but charity. This new society exists, in brief: (1) to put members (without fees or charges) into touch with any existing vacancies; and (2) to promote and undertake such activities as will create work—as it is realised that there are not enough jobs to go round. One of the chief causes of deterioration of unemployed men being the loss of contact with active business and the inferiority complex arising from isolation, a clubroom has been opened at the above address where members can meet. Already a number of men have been placed in suitable employment, and it is expected in the future to find employment for an increasing number. In order to provide funds for office expenses a business bureau has been started and is now in active operation. Architects, builders and builders' merchants can give considerable help by sending in inquiries for the services of this bureau, which are conducted on efficient business lines. Arrangements are now being made to start tourist camps in various parts of the country, to be run on lines similar to those which have already proved so successful in Canada and the States. The Society—on the advisory council of which Professor A. E. Richardson, F.S.A., F.R.I.B.A., and Mr. S. D. Meadows, F.R.I.B.A., serve—have a number of other plans under consideration, but are seriously hampered by lack of funds. They welcome the investigations of anyone who, interested in their aims, would care to support them in carrying them out.

Unemployment Grants and Employment. It will be remembered that at one time a controversy was raised in connection with relief works and the number of unemployed men who would be employed for a certain expenditure, and a partial answer has now been provided by the Report of the Grants Committee, which was summarised in *The Times* for June 23. The problem has always been presented in the form "How many men will derive employment from an expenditure on works approved by the Committee, or some other body, of one million pounds?" From inquiries based on fact, the answer given to this question by the Committee is that such an expenditure will give direct employment to rather more than 2,500 men for a year. But on the question of how many men would benefit indirectly from this expenditure, the Committee had not sufficient evidence to enable them to give any reliable estimate. The Report states that a general assumption has been that for every man directly employed another man would indirectly obtain employment, but the Report, as might be expected, points out that this must depend upon the character of the work undertaken. All the Committee could definitely assert was that over the whole field of approved works the capital expenditure of one million pounds gave fully 2,500 man-years of direct employment. There are obviously other matters to be considered in connection with relief works; the character of the work, whether remunerative or unremunerative, and the capacity of the labour employed.

GENERAL NEWS

Professional Announcements.

Mr. M. C. Broad, F.R.I.B.A., has changed his address to Calle Adolfo Berro 1119, Paso Molino, Montevideo, Uruguay, South America, and will be pleased to receive trade catalogues.

Mr. Arthur A. Stewart, A.R.I.B.A., is joining the firm of Messrs. Burgess, Holden and Watson, practising at Lloyds Bank-chambers, Beaconsfield, Bucks, and 12, Gray's Inn-square, W.C., as a partner, Mr. J. G. Burgess, F.R.I.B.A., lately of the firm, having recently died at his Beaconsfield home. The firm will continue to practise under the old title, the partners being Mr. C. H. Watson, F.S.I., L.R.I.B.A., Mr. Arthur A. Stewart, A.R.I.B.A., with Mr. W. F. C. Holden, F.R.I.B.A., as consultant.

Messrs. William and Edward Hunt, FF.R.I.B.A., have removed to new offices in Brettenham House, Lancaster-place, Strand, W.C.2. The telephone numbers remain as at present, viz. : Temple Bar 1843 and 7801.

Mr. John L. Mulvaney, F.R.I.B.A., M.I.Struct.E., architect and surveyor, has commenced practice in Bombay, and will be pleased to receive trade catalogues addressed to Post Box No. 720, Bombay, India.

Award of Albert Medal.

The Council of the Royal Society of Arts, with the approval of the president, the Duke of Connaught, have awarded the Albert Medal for 1933 to Sir William Llewellyn, P.R.A., for his encouragement of art in industry.

Leverhulme Scholarships in Architecture.

The first Leverhulme Scholarship in architecture, value £200 a year for five years, tenable at the Architectural Association School of Architecture, has been awarded to Mr. Duncan, of Brechin, Scotland.

Architects' Benevolent Society.

The report of the Council for 1932 and the list of donors and annual subscribers, has now been issued by the Architects' Benevolent Society. Details of the year's work were referred to at the annual general meeting, reported in our issue for May 19.

Stoke Newington Flats.

In connection with the assessor's award in this competition, published in our last issue, the address of Messrs. Howes and Jackman, AA.R.I.B.A., should have been given as 10, Gray's Inn-square, and not Gray's Inn-place, as stated.

An R.I.B.A. New Zealand Representative.

Mr. F. de J. Clere, who was appointed R.I.B.A. Hon. Secretary for New Zealand in the year 1894, has now held the appointment for no less than 39 years. In point of election one of the oldest Fellows of the Institute, Mr. Clere was elected an Associate in 1882 and a Fellow in 1886, and has thus passed his half-century as an active member of the R.I.B.A.

South Africa House Opening.

Much pleasure will be felt at the high praise accorded by H.M. the King and by Mr. te Water, the High Commissioner for South Africa, to Sir Herbert Baker on his work at South Africa House, opened by His Majesty on June 22. It is an excellent and propitious sign that the share of the architect in the erection of a building is becoming more generally recognised : that recognition can seldom have been more handsomely made than in the case in point. The obvious thought and care that have gone to the internal finish and decoration of the building have produced remarkably beautiful effects.

District and Building Surveyors.

The R.I.B.A. statutory examination for the office of District Surveyor under the London Building Act, and the examination for the office of Building Surveyor under Local Authorities, will be held at the R.I.B.A., London, on October 11-13. The closing date for receiving applications for admission to the examinations, accompanied by the fee of £3 3s., is September 20. Full particulars of the examinations and application forms can be obtained from the Secretary, R.I.B.A.

Welsh School of Architecture.

The students of the Welsh School of Architecture played a prominent part in the annual sports of the Technical College, Cardiff, held recently, taking 7 first out of 11 events.

The two departmental events, the tug-of-war and the 1-mile relay race, were both won by the School of Architecture, while other events were won by D. K. G. Cumming and D. J. Armstrong, both students of the school, Mr. Cumming winning the 120 yds. hurdles, 880 yds. flat and 1-mile flat, while Mr. Armstrong won both the long jump and the high jump.

London School of Economics: New Library.

Lord Macmillan, chairman of the Court of the University of London, opened the new building of the British Library of Political and Economic Science at the London School of Economics and Political Science on June 22. Referring to the library of the school, Lord Macmillan said it provided the material for the study of every branch of the science of human life. It was entitled to be reckoned among the great libraries of the world—indeed, in its own sphere it was pre-eminent. Let them not forget that it was through the generosity of the Rockefeller Trustees that the school had had the " purse ability " to effect the impressive additions to the library buildings which they were to inaugurate. It was fitting that the beautiful new reading room should be christened the Haldane Room, for no one was a better friend to that school than the eminent statesman whose memory they had thus chosen to honour. The architects are Messrs. Trehearne and Norman, Preston and Co.

R.I.B.A. NEW PREMISES

FOUNDATION-STONE LAYING CEREMONY.

The Rt. Hon. Lord Howard de Walden and Seaford, Hon. F.R.I.B.A., laid the foundation-stone on Wednesday of the new R.I.B.A. premises, situated in Portland-place and Weymouth-street. It will be remembered that in the recent competition the designs of Mr. G. Grey Wornum, F.R.I.B.A., were selected. No time will be lost in carrying out the work, the date for completion being September 1, 1934. Empire materials will be used throughout.

Sir Raymond Unwin, in his opening remarks, said that would probably be his last ceremony before the new presidency was taken over by Sir Giles Scott. The project was commenced at a difficult time, and the Institute had endeavoured to practise what it preached, and that was to continue building which they considered was to the benefit of the community. They had chosen their architect in a way that they would like all public bodies to follow, and that was by open competition. They had been in consultation over the design with Mr. Wornum, and he (the speaker) now thought they would have an admirable building. They had secured as their builders a very old-established firm—Messrs. Ashby and Horner—and he believed the contract sum had come out almost exactly at the amount the architect had given them.

A service of dedication having been conducted by the Rev. Arthur Buxton,

Lord Howard de Walden deposited under the foundation-stone copies of the following :—*The Times, The Journal of the Royal Institute of British Architects, The Builder, The Architect and Building News, The Architects' Journal, The Architectural Review, Architectural Design and Construction*, and *Building*. He then performed the ceremony of laying the foundation-stone. The trowel used was designed by Mr. Bainbridge Reynolds.

Mr. Maurice Webb, proposing a vote of thanks to his lordship, said the ceremony had been treated as a purely Institute affair. No better person, he considered, than Lord Howard de Walden could have been invited to perform the foundation-stone laying ceremony. He, as they all knew, was a great patron of the arts—and was their landlord. He (the speaker) hoped that in time Portland-place and the district would be a centre for all great arts and crafts bodies.

Sir Giles Scott seconded the vote of thanks, and Lord Howard briefly replied.

COMPETITION NEWS

The Antwerp Town Planning Competition.

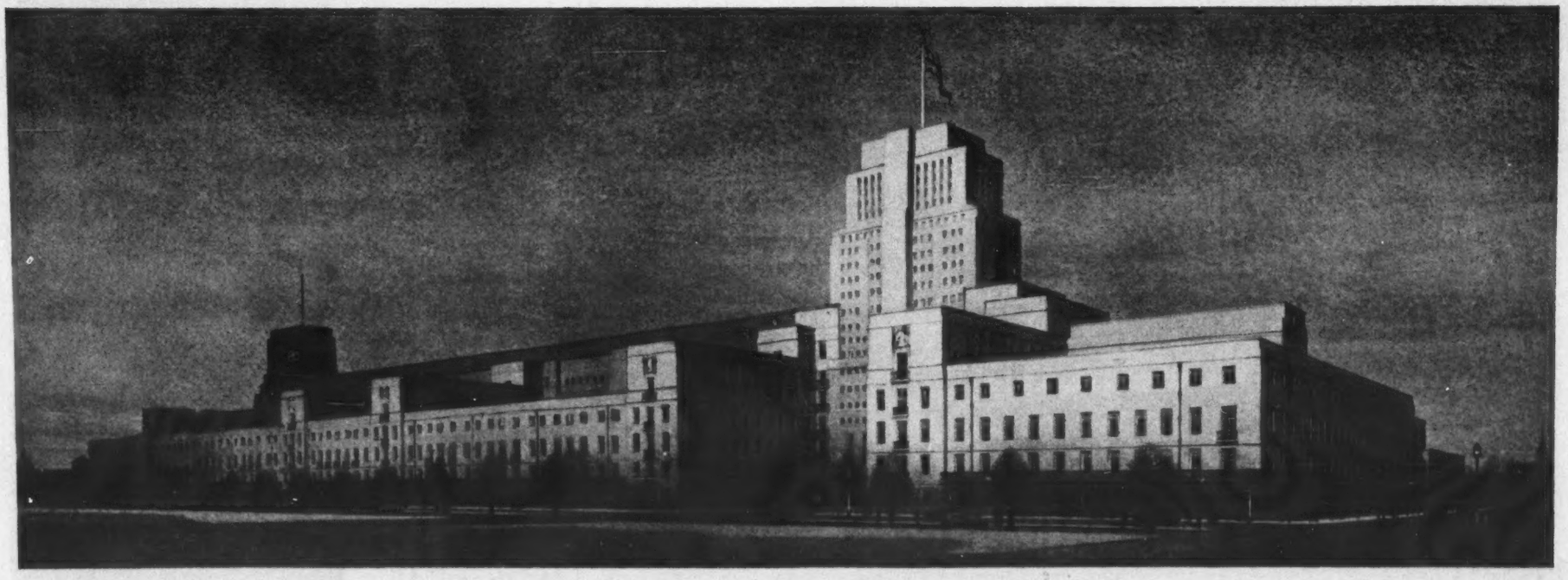
The jury, composed of Messrs. L. Bonnier (president), de Braye, de Heem, de Ridder, Unwin and Van de Velde and Baron Horta, has examined the schemes sent in for the lay-out of the left bank of the River Scheldt. The scheme called for was a complete plan of urban development, with all designs and directions necessary to bring this about. The jury has felt unable to award a first prize, as none of the schemes submitted for its examination offered a complete solution of the problem. The jury has therefore awarded three second prizes of Frs. 50,000 each to the following firms :—Cols and de Roeck, Antwerp ; A. Gutton, Paris ; Viret Marmorat and Monnoyer, Brussels. Four second prizes of Frs. 25,000 have been awarded to Dusseldorf, Paris, Dresden and Antwerp firms. Firms from Paris, Antwerp (3) and Michigan, U.S.A., have been awarded sums of Frs. 10,000 each.

Proposed Bathing Pool, Llandudno.

The Competitions Committee of the R.I.B.A. desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

CURRENT COMPETITIONS

New municipal buildings and town hall at Crouch End, for Hornsey T.C. Mr. C. Cowles-Voysey, F.R.I.B.A., assessor, with Mr. W. H. Adams, F.R.I.B.A., Borough Engineer and Surveyor, as consultant. Premiums of £350, £250 and £150. Conditions from Mr. E. B. Croasdell, town clerk, Town Hall, Highgate. Dep. £1 1s.	Particulars published in "Builder." March 21 May 12	Sending in date. Sept. 23
New hospital, for Surbiton Hospital. No further applications admissible. Mr. C. Ernest Elcock, F.R.I.B.A., assessor. Premiums, £120, £75, £50 and £25	March 3	Sept. 1
Council offices, Slough, for U.D.C. Mr. H. S. Goodhart-Rendel, F.R.I.B.A., assessor. Premiums, £150, £100 and £50. No conditions yet available	March 31	-
House designs for Gidea Park, Ltd. Premiums, £350. Assessors, Prof. S. D. Adshead, A. E. Beresford, E. G. Culpin, E. Maxwell Fry, Howard Robertson and W. Harding Thompson. Conditions from Surveyor, Gidea Park Estate Office, Hare Street, Gidea Park, Essex. Dep. 5s.	June 23	Sept. 11
New sanatoria buildings at Whiteabbey, Graymount, for Belfast Tuberculosis Committee. £100 premiums. Mr. R. S. Wilshere, A.R.I.B.A., P.A.S.I., assessor. Confined to architects practising in Northern Ireland	May 12	-



Perspective View of the New Buildings for the University of London, Bloomsbury.

MR. CHARLES HOLDEN, F.R.I.B.A., Architect.

The foundation stone of the new buildings for the University of London, Bloomsbury, was laid by the King on Monday last. The work of developing the site will be carried out in stages, probably spread over many years. The first task of the architect has been to prepare a general lay-out for the entire site. A serious problem was how to provide for a substantial extension of each unit in an orderly manner without leaving a number of untidy ends, and it was decided to adopt the vertebrate type of planning. The scheme provides for the placing of the main group of buildings centrally on the site, the open spaces being more or less evenly distributed along the two main frontages to the east and west. The exterior of the buildings will be faced to a height of about 15 feet with granite and above with Portland stone. The core of the main structure will be of brick. There will be large light courts, each of which, as at present planned, will measure 92 feet by 70 feet. Those on the west side of the central spine will be linked with those on the east by means of an open colonnade under the spine, thus making a series of quadrangles of about 180 feet by 92 feet. These quadrangles will be laid out as gardens with grass lawns. The first building to be erected will be the Senate house and official headquarters of the University. This is to occupy the south-west corner of the site and will face the north front of the British Museum. It is planned that the University Hall, which will be identified with the ceremonial aspect of University life, should adjoin the Senate house, and be placed on the central axis of Russell-square. This Hall will be the City's gift to the University. The University Library, towards the cost of which the Goldsmiths' Company have contributed, will probably be placed above the Senate house and will also use the first and upper floors of the tower which will dominate the whole group. This tower, when completed, will be upwards of 200 feet high and will span what was originally Keppel-street. On the ground floor will be the main entrance for the whole group. The allocation of the buildings to the north of the tower is still under consideration; but work on the new building for the Institute of Education will, it is hoped, be started at an early date. The London County Council have made provision for the cost of this building in addition to their grant of £250,000 towards the cost of other buildings on the site. Our view is from Montague-place, looking northwards along Malet-street.

CORRESPONDENCE

Valuation of Damage to Ancient Lights.

SIR,—I have read the letter of Mr. A. S. E. Ackermann, in the issue of May 19 last. and the subsequent letter of Mr. P. J. Waldram, in your issue of May 26. As one of the witnesses called, on behalf of the plaintiffs, and as the author of the Daylight Plans, on which Mr. Ackermann based his figures, I was, naturally, deeply interested in the judgment of Mr. Justice Maugham, in the case of the Sheffield Masonic Hall Co., Ltd., *v.* The Sheffield Corporation. It was the longest judgment I have ever heard delivered, and occupied all the morning sitting of the Court. It was, in fact, more like a reasoned conversation than a formal judgment. The learned judge expressed his views very fully. and also created profound interest by expressing opinions that may some day be adopted by the Court of Appeal.

The main point that arises out of the correspondence, in which Mr. Ackermann and Mr. Waldram have taken part, seems to me to be not so much the amount of compensation awarded to my clients, as the general principle of assessing compensation by means of calculations. When I wrote my book on "Easements of Light," which appeared in 1929, I suggested two methods of assessing damage by calculations. One was on the basis of a flat rate, and the other on the basis of a progressive rate. The progressive rate made allowance for the increase in value of the floor space, as one approaches a window. I think all valuers are agreed that, in normal cases, the area of a room near to a window, where the light is best, is of greater value than a more remote part, which may be inadequately illuminated by ordinary daylight. Neither of the methods is the same as that suggested by Mr. Ackermann, and, I understand, used by him for some time. We need not, however, consider the relative advantages or disadvantages of various methods. The main issue, to my mind, is as to whether it is desirable or not to assess compensation, by means of careful logical deduction, with the assistance of calculations based upon the areas of floor detrimentally affected, under the proposed or ultimate conditions. I know that many valuers consider that it is preferable merely to examine Daylight Plans, and, without any calculations based on the areas detrimentally affected, to form an opinion by inspection as to the extent to which the rental value of the room in question would be depreciated. Eminent valuers have, however. adopted both methods. and my experience has been that those who have proceeded without careful calculations, based upon the area affected, have sometimes assessed the damage at such widely different amounts, as to be quite unable to assist the Court in giving judgment. I do not doubt for one moment that each of the valuers was perfectly conscientious, and believed that he was acting with perfect fairness, but the fact remains that some of the valuations prepared in that way, bore no relation to one another. I am not referring to any particular case. In some instances, estimates of depreciation of that kind have been as much as five times others prepared in the same way. Evidence as to value of that kind is, unquestionably, useless.

Personally, I think it is a matter of secondary importance as to whether valuers adopt the method suggested by Mr. Ackermann, or one of the two advocated in my own book. The main thing seems to be that some method of calculation should be adopted in all normal cases. I quite agree that all cases are not normal, and that each has to be considered individually. There are cases in which local valuers with special knowledge, have been able to show that, owing to changes in the industries carried on in certain areas, there would be no prospect of obtaining tenants, who would pay any appreciable rent for a considerable time. There are also occasional cases in which tenants in special trades could alone be expected to take rooms in certain quarters. Sometimes, such tenants require abundance of good light, in order to work at all, and rooms that have not such light would be of no use to them. In other cases, daylight is not so important. In Lancashire, those engaged in textile industries insist upon having a good north light, without any sunshine, in order to examine the colours and textures of various kinds of woven fabrics. This is, however, only one of many special cases that might be cited. It will. therefore, be seen that each case needs individual consideration, and that the procedure in one case may be wholly unsuitable in another. Nevertheless, I believe it will be found that there is scarcely any case in which some method of calculation would not, if properly used, produce infinitely more reliable assessments of compensation than the mere guesses of eminent valuers, who wish to be perfectly fair.

JOHN SWARBRICK.

SIR,—In the penultimate paragraph of my letter, which appeared at p. 801 of your issue of May 19, I was careful to state that £563 per annum was a *gross* rent, while the £400 per annum was a *net* rent. This, unfortunately, has not prevented Mr. P. J. Waldram from quoting in your issue of May 26 those figures as if they were both gross or both net. The fact that the judge took the rent to be "about £2,200 a year" is sufficient justification for my having used that figure.

A. S. E. ACKERMANN.

The Carnegie United Kingdom Trust.

The trustees' annual report for 1932 gives an excellent account of the many benefactions which this trust has carried out during the year. Especial attention has been given to attempts which are being made to provide occupation and healthy relaxation for persons out of employment. Such matters as public libraries and playing fields have also largely engaged the Trust's attention.

HIGHER BUILDINGS

BRITISH STEELWORK ASSOCIATION MEMORANDUM TO THE L.C.C.

IN accordance with an invitation of the London County Council to submit comments on the London Building Act, the British Steelwork Association has issued a memorandum for the information of the Advisory Committee of the L.C.C. in respect to Section 51 of the Act, dealing with the heights of buildings. The Association, it is stated, has endeavoured in this memorandum to submit proposals which it is believed would do much to rectify the great difficulties of traffic in London, and at the same time would supply a very necessary stimulus to the reconstruction of areas in which development lagged seriously behind present-day requirements.

Following is the substance of the memorandum:—

Section 51 (1) of the London Building Act, 1930, enacts that "a building shall not be erected of or be subsequently increased to a greater height than 80 ft. (exclusive of two stories in the roof and/or ornamental towers, turrets or other architectural features or decorations) without the consent of the Council."

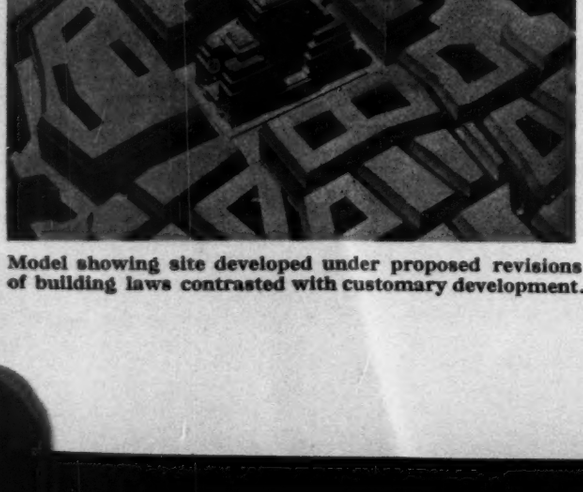
It is suggested that this section of the Act should be replaced by a by-law or regulation giving the right to construct higher buildings provided that they are of fire-resisting construction throughout and equipped with modern fire-fighting appliances, and provided that the upper stories are set back to give light and air to surrounding streets, and that due attention is paid to the flow of potential traffic to and from such buildings.

The advantages that would accrue from the rebuilding of selected sites under such improved conditions may be considered under the following heads:—

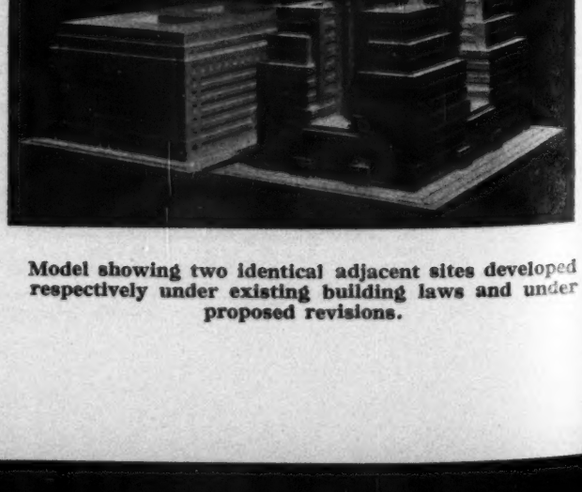
Town Planning and Architecture.

To quote the Report of the Royal Commission on Transport (page 205), "in many parts of London there are areas honeycombed with small streets and lanes, useless for traffic purposes. Wholesale redistribution of the area covered respectively by streets and buildings would, in such cases, replace small, narrow, and useless streets and the type of building that alone is possible in them by fewer but broader roadways and buildings of a kind that would increase and not diminish the accommodation."

The stimulus for the rebuilding of areas such as these may come from a public authority, which could at great cost purchase large areas of land and demolish buildings already in existence, thus securing the power to "town-plan" an area and rebuild that area in reasonable architectural taste, or it could be brought about by private enterprise where the permission to erect a reasonably high building would provide the incentive for the acquisition of large and adequate sites



Model showing site developed under proposed revisions of building laws contrasted with customary development.



Model showing two identical adjacent sites developed respectively under existing building laws and under proposed revisions.

and the surrender to public use of such amount of frontage as would safeguard the necessary traffic facilities. Rebuilding on these lines would mean the replacement of old, probably insanitary and certainly fire-hazardous property by modern, fire-resisting structures.

Fortunately, to bring into focus the development we have in mind is not a difficult matter. There is in our midst at least one building of the type which satisfies all reasonable claims which a public authority may demand. Such a building is the Underground Railway Building in Westminster, built to a total height of 180 ft. How does this building satisfy the essentials of social amenities, town-planning, fire-resistance and traffic? On the score of social improvement one must admit that for light and air it is excellent. For hygiene and fire-resistance one need only compare it with the buildings it has displaced. Its construction is of steel and stone-faced brickwork and its combustibility (having no timber partitions and no timber window frames) is negligible. Of its architecture there is little need to speak, except to remind oneself that it was awarded by the Royal Institute of British Architects the London Architecture Medal in 1929.

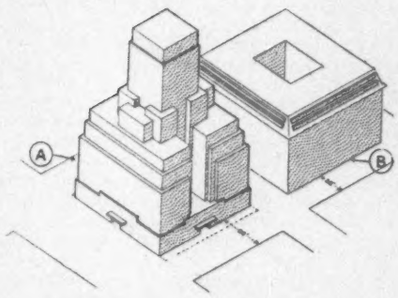
Where it fails to develop its full value is on the economic side. Despite considerable sacrifices of space to the common good and to every consideration of its tenants, the occupation of the top stories is not permitted within the existing terms of the London Building Act. The Underground Building, as an example of town-planning, points the way to the rational reconstruction of London; it throws into vivid emphasis the advances in modern architectural layout which the authorities might well seek to establish for the whole of London.

It will be recognised that the impulse to all commercial building is economic and that economic methods of construction and a freedom to develop earning space must not be unreasonably thwarted. The restrictions on earning space of buildings are too apparent in London to require emphasis, and are such that every cubic foot of space has to be squeezed into service, and buildings have to be driven three or four stories underground in order to secure usable and suitable accommodation on a given site. Not only is subterranean construction of this sort unduly expensive, but it brings about greater difficulties in fire-protection, and much less hygienic conditions in respect to light and air than would result from a relaxation in respect to height.

Traffic.

Just as in the case of fire, so in the question of traffic; uninstructed criticism is apt to attribute traffic congestion to the higher building. In point of fact, however, the high building is the one factor which, if properly pressed into service, can free us from the mistakes of the past. Large buildings, particularly in Canada and the U.S.A. (and here let it be emphasised that skyscrapers in the Manhattan sense are not suggested for London, but rather the large composite "efficiency block" such as has been developed so successfully in Montreal), are laid out so as to consume as much as possible of their own traffic. They have, on convenient floors, restaurants, banks, post offices, haberdashers, etc., which retain pedestrian traffic within the building, and, when conveniently situated, can be connected by subway with underground railways or other traffic lines. It must be remembered, however, that street congestion is not brought about by larger building blocks themselves. Few side-walks are easier to negotiate than those adjoining the Underground Building, Bush House, or the whole of Kingsway, and the contribution of these buildings to traffic congestion, if any, is negligible. Street congestion in London is due to other causes, and may be seen at its worst on shopping nights in the suburbs, or wherever theatres and cinemas abound.

The effect of higher buildings on traffic congestion is greatly exaggerated and will bear little examination. The obvious method of re-



From the Memorandum of the British Steelwork Association.

Higher Buildings: Isometric Sketch showing two identical adjacent sites.

SITE A DEVELOPED UNDER THE PROPOSED REVISIONS AND SITE B DEVELOPED UNDER THE EXISTING BUILDING LAWS.

planning London, if a free hand were possible, would involve the relinquishment of an adequate proportion of built-up area for traffic avenues, the loss of occupied space being made up by increase in height.

Social Amenities—Light, Air and Smoke Nuisance.

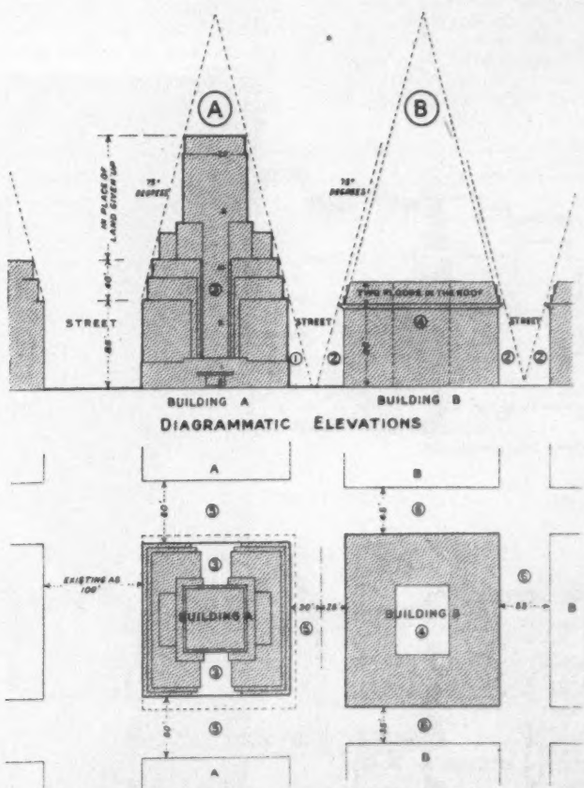
In respect of the provision of light and air, there have been advanced against the high building arguments which will quickly be rectified by an inspection of the Underground Building. A great deal has been written about the incidence of the "angle of the sun" and far too little about the bad conditions of light in the narrow streets, which conditions only progressive city planning can remove. How does the high building affect light and air? With a high building properly stepped back (as shown in accompanying illustrations) the effective light reaching the roadway and adjacent buildings is much greater. But to these advantages of better light and air must also be added the great advantages of the modern centrally-heated building in eliminating smoke and soot.

Fire Prevention

The question of fire prevention is far too often regarded merely from the angle of the alleged difficulty in dealing with fire in rooms over 100 ft. above ground level. But the proper manner in which the fire-hazard should be regarded is rather in comparison with the much greater hazard which a modern building displaces by the demolition of its part-timber Victorian predecessor. London rebuilt on the lines of modern blocks such as Bush House is surely much safer than the London of narrow part-timber buildings, often very difficult of access.

In a modern fireproof office or apartment building the contingency of fire is itself very remote, and even small as it is, can be met by permitting only incombustible furnishings above a height of, say, 100 ft. Buildings must, after all, represent an insurable asset, and the ordinary commercial safeguards of insurance as a factor operating to reduce fire risks will play an important part in securing their safety.

Admitting the limitations of the London water mains, there is nothing whatever to prevent architects and hydraulic engineers from designing and equipping a building so that fire prevention is fully catered for by:—(1) Fireproof construction, with fire towers; (2) incombustible materials and fittings above a height of 100 ft.; (3) set-back upper stories,



From the Memorandum of the British Steelwork Association.

Higher Buildings: Diagrammatic Plans.

BUILDING A: NEW.

1. Higher buildings will not reduce light and air to streets (all set-backs within angle of 75 deg.).
3. Light wells OPEN TO STREET give better light and air to all.
5. Wider streets for increased traffic.
7. Larger and more compact buildings. Available cube (this example) increased to 2,970,000 cubic ft.

BUILDING B: EXISTING.

2. Existing cornices, dormers, etc., darken the streets.
4. Interior light wells are dark and unhygienic.
6. Retention of narrow, congested streets.
8. Cube at present (this example) 2,270,000 cubic ft.

Photo by Hills and Saunders.

The R.I.B.A. Annual Conference, Cambridge:

Note.—The photograph has been divided, for the purpose of publication, into two parts, t

nbridge: Group Photograph taken at King's College.

vo parts, the right-hand side of the upper section running on to the left-hand side of the lower.

ROYAL HOSPITAL SCHOOL, HOLBROOK, SUFFOLK

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., ARCHITECTS

Detail of Entablature, Main Entrance. Carving in Pediment by Mr. William Bloyce.

THE new Royal Hospital School for the Lords Commissioners of the Admiralty has been lately completed from the designs of Messrs. Herbert T. Buckland and William Haywood, FF.R.I.B.A. The "Royal Hospital School" forms part of Greenwich Hospital, which was founded by King William and Queen Mary on October 25, 1694, when the Royal Palace and grounds at East Greenwich were granted for conversion into a hospital for disabled seamen of the Royal Navy. Arrangements for teaching ten boys, sons of seamen, were made as early as 1712; and by 1731 the number of boys under instruction had reached a total of sixty. In 1759 the first building to serve exclusively as a school was erected, and continued in use until 1783, when it was demolished, and a school with dormitory accommodation for two hundred boys was built on the site.

In 1807, in order to make better provision for the Royal Naval Asylum, which had been established at Paddington some years before for the education of sons and daughters of seamen of the Royal Navy and Royal Marines, King George III granted the Queen's House at Greenwich, with land belonging to it. School buildings were erected and connected to the house by colonnades; the Hospital School being transferred to the new establishment in 1821.

By Act of Parliament in 1825 the Royal Naval Asylum was consolidated with Greenwich Hospital, and the "Royal Hospital School" was thereby formed. In 1870 the school was reorganised, divided into nautical and upper nautical schools, and the naval uniform and régime adopted.

The Boreman foundation, originally the Green Coat School, Greenwich, endowed by Sir William Boreman in 1672 for twenty boys born in Greenwich (sons of seamen, watermen or fishermen) has also contributed to the character and reputation of the "Royal Hospital School." In 1887 one hundred boys of the Boreman foundation were admitted as day boys to the upper nautical school for education, with permission to wear naval uniform. This arrangement has now ceased, and the Boreman funds are applied by means of exhibitions for the higher education of selected Greenwich-born children of seamen, watermen or fishermen, with preference to the children of men with service in the Royal Navy, Royal Marines and Royal Air Force.

The new buildings at Holbrook, which are the result of an open competition, stand 90 ft. above sea level, on a commanding site overlooking the estuary of the Stour, and with a distant view of Harwich. The greater part of the 800 acres of land owned by the establishment is to be farmed for the benefit of the school, and 50 acres have been laid out as playing-fields.

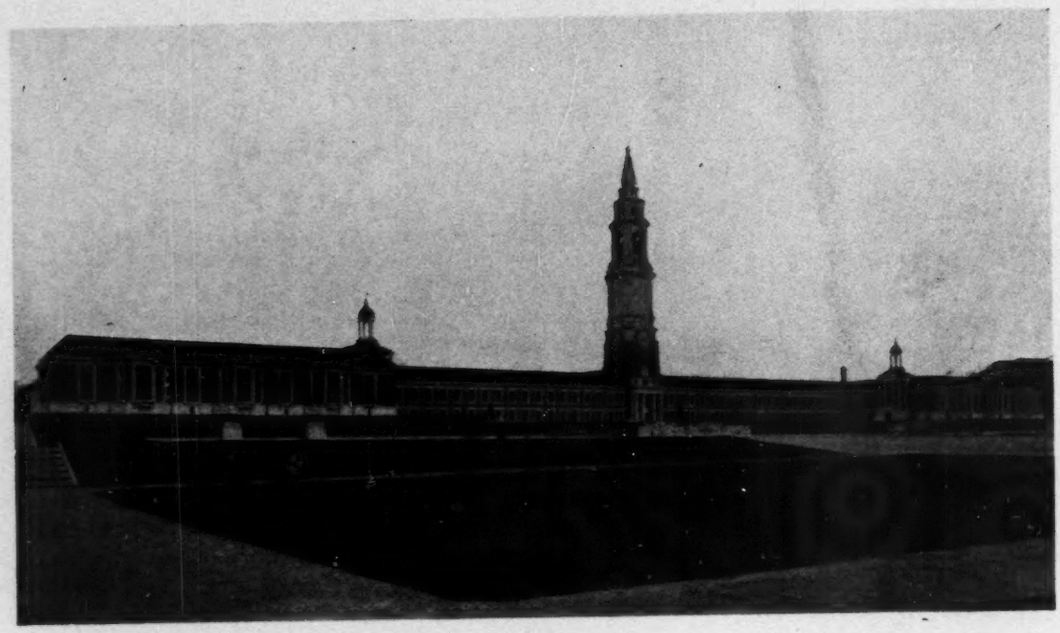
Approaching the site from Ipswich, the Stutton-road passes diagonally through the polygon which marks the main entrance to the school; the road then continues in a south-westerly direction until it coincides with the main east and west axis of the buildings. At the eastern extremity of this axis the view is closed by the Nelson Hostel, in which building all new boys are entered and isolated for a preliminary period before being drafted into the general curriculum of the school.

The Royal Hospital School was opened on April 27, with a complement of 860 boys. The general accommodation, however, has been planned for 1,120; and sites have been left for two additional hostels, which will be built when the establishment is brought up to full strength.

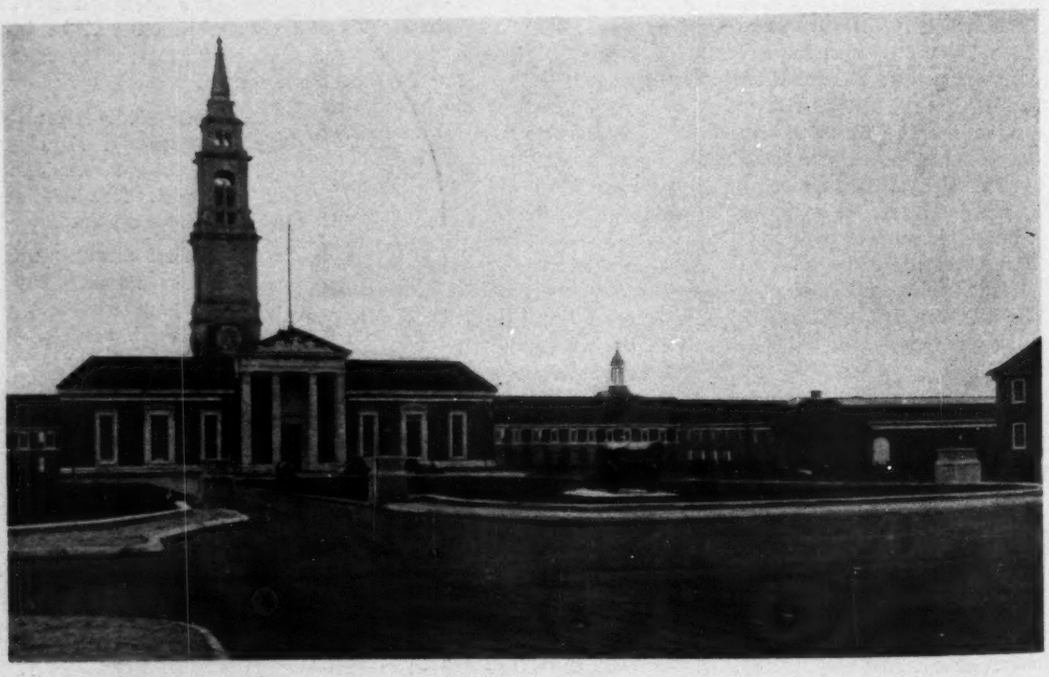
The main contract for the erection of the buildings was signed on August 2, 1928, and did not include for the erection of the chapel. This building was the subject of a later contract.

The general arrangement of the buildings may be studied from the plans reproduced. The harmonious effect of the whole scheme is notable, and is due to a very well-ordered design and to the use of similar materials throughout. The Blockley bricks employed are brownish-red in colour, with a rough texture, and combine excellently with the purpose-made bricks of the same clay used in the window architraves, plinths and arches. Portland stone is used mainly for dressings and other stone features, and there is much good carving and sculpture. A list of firms and others engaged on the work is given on page 1058.

[The competition of which these new buildings are the outcome was a limited one, held in 1925, the late Sir Aston Webb, R.A., being the assessor. The winning design of Messrs. Buckland and Haywood was illustrated in our issue for May 8, 1925.]



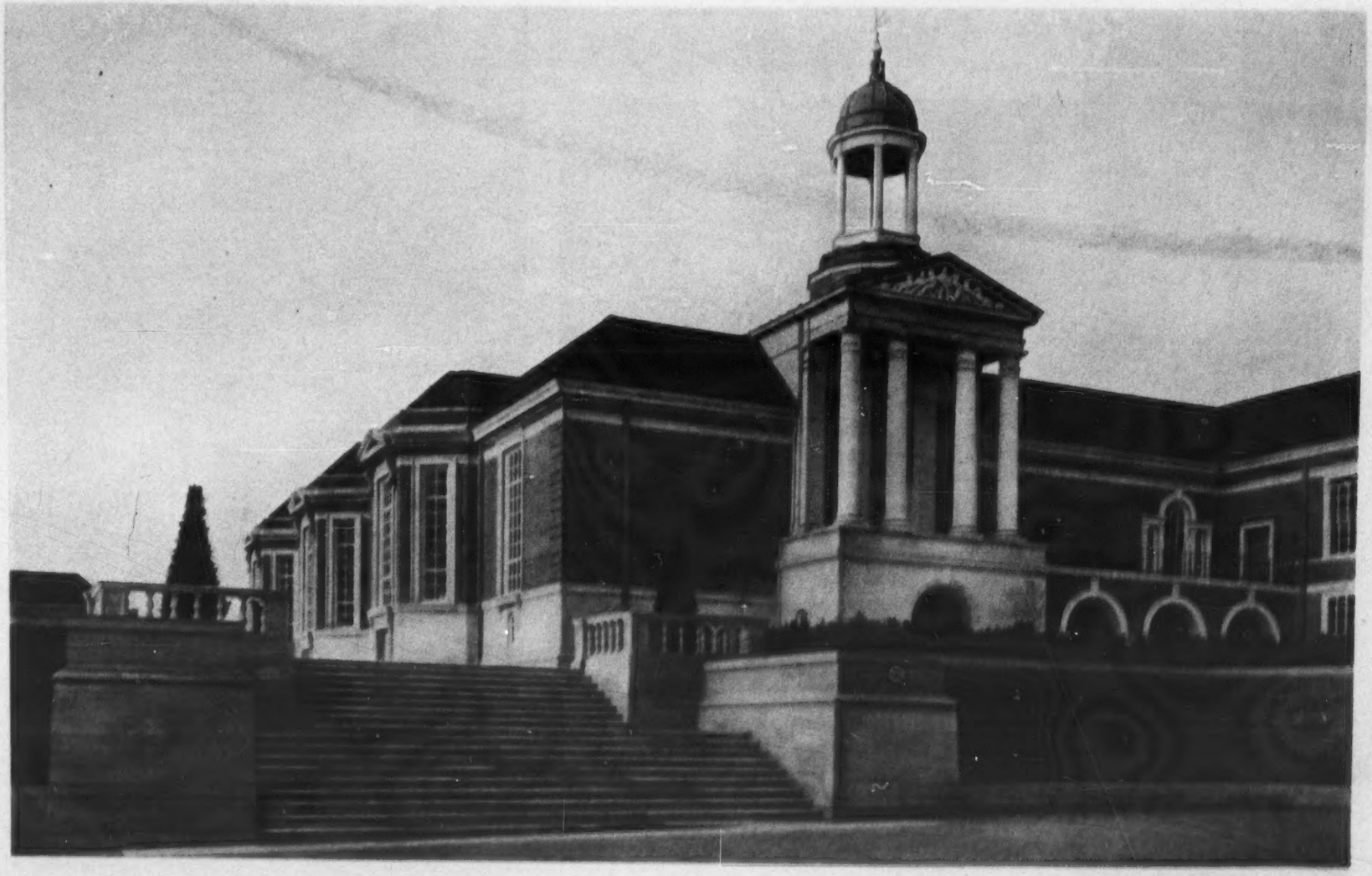
CENTRE BLOCK.



MAIN ENTRANCE.

Royal Hospital School, Holbrook, Suffolk.

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., Architects.

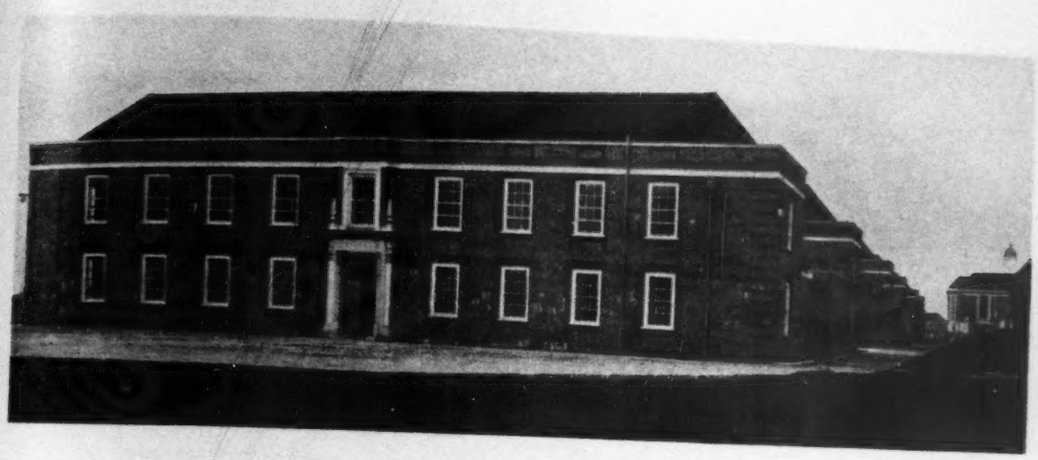


Royal Hospital School, Holbrook, Suffolk: Dining Hall.

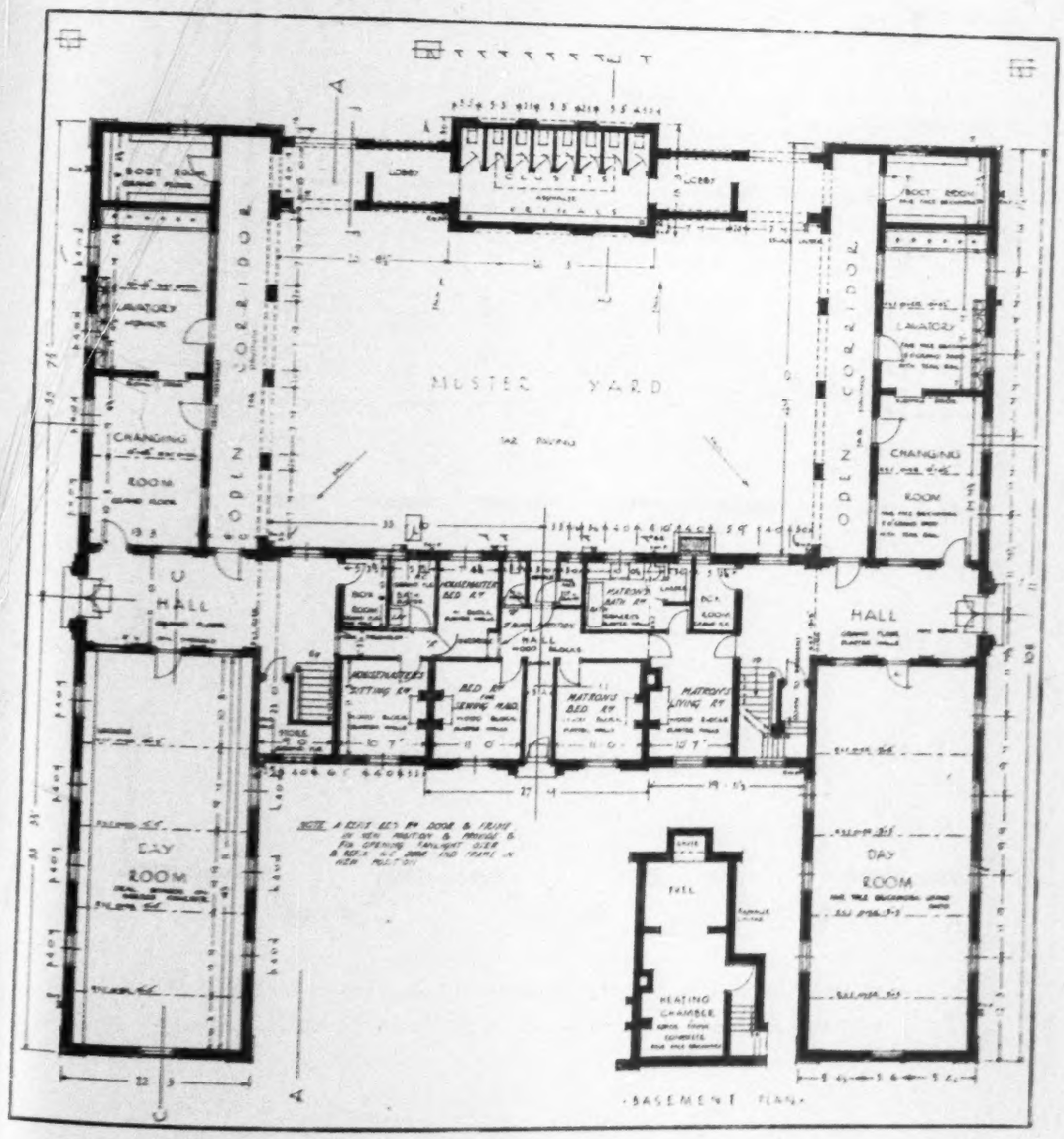
MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., Architects.

Royal Hospital School, Holbrook, Suffolk; Entrance Hall (above) and Assembly Hall.

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., Architects.



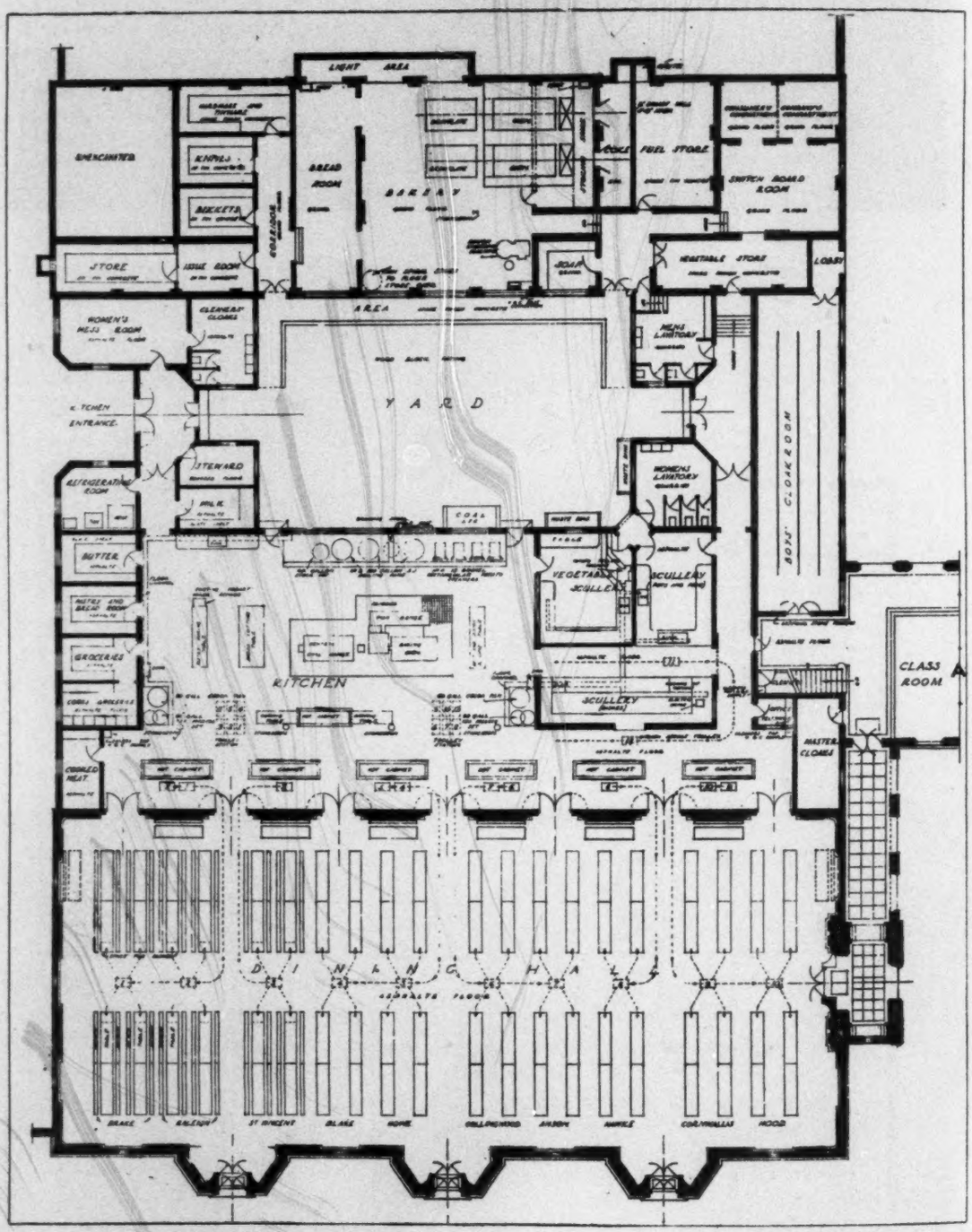
"East" Frontage.



The "Hawke" Hostel.

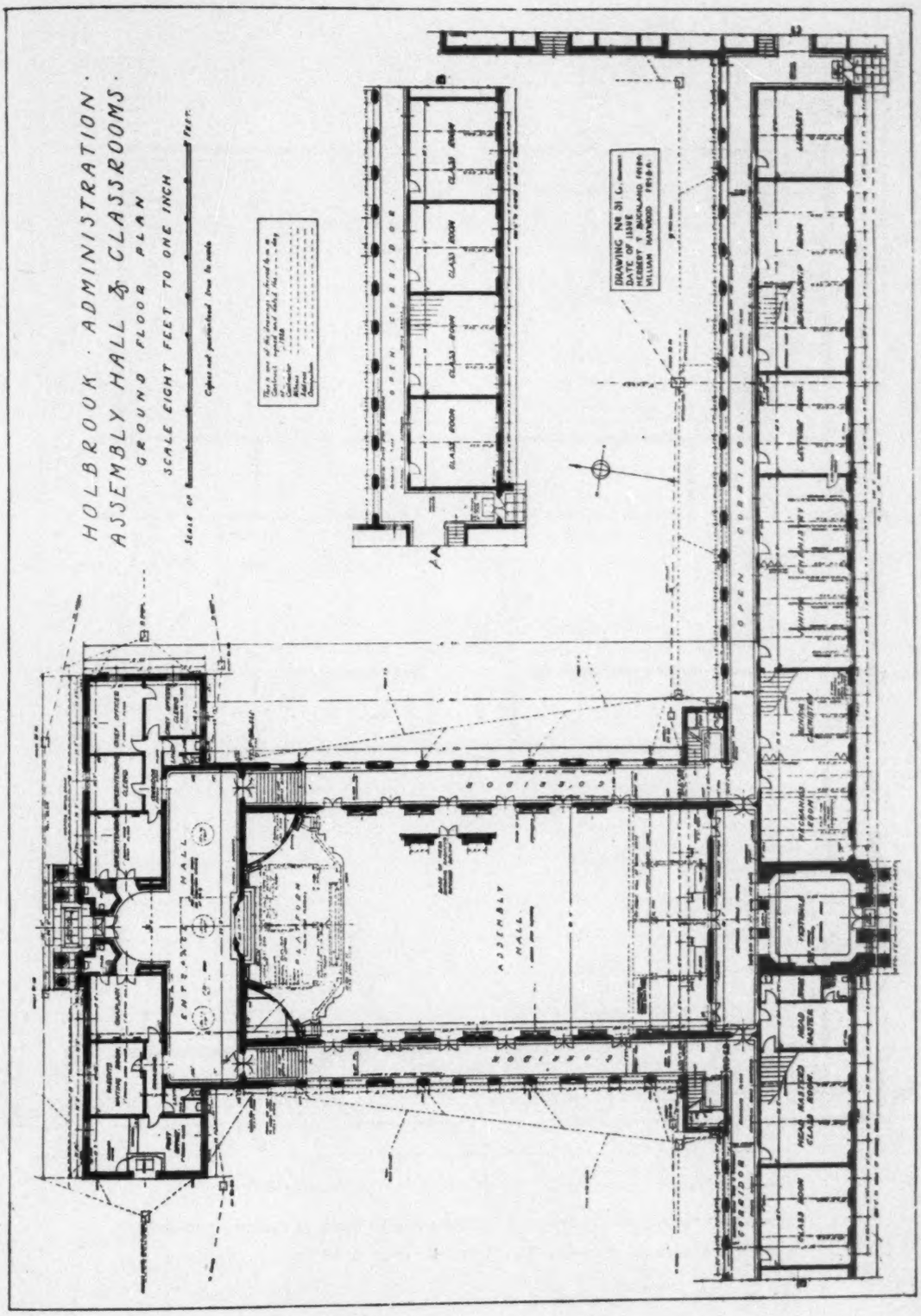
Royal Hospital School, Holbrook, Suffolk.

Messrs. Herbert T. Buckland and William Haywood, FF.R.I.B.A., Architects.



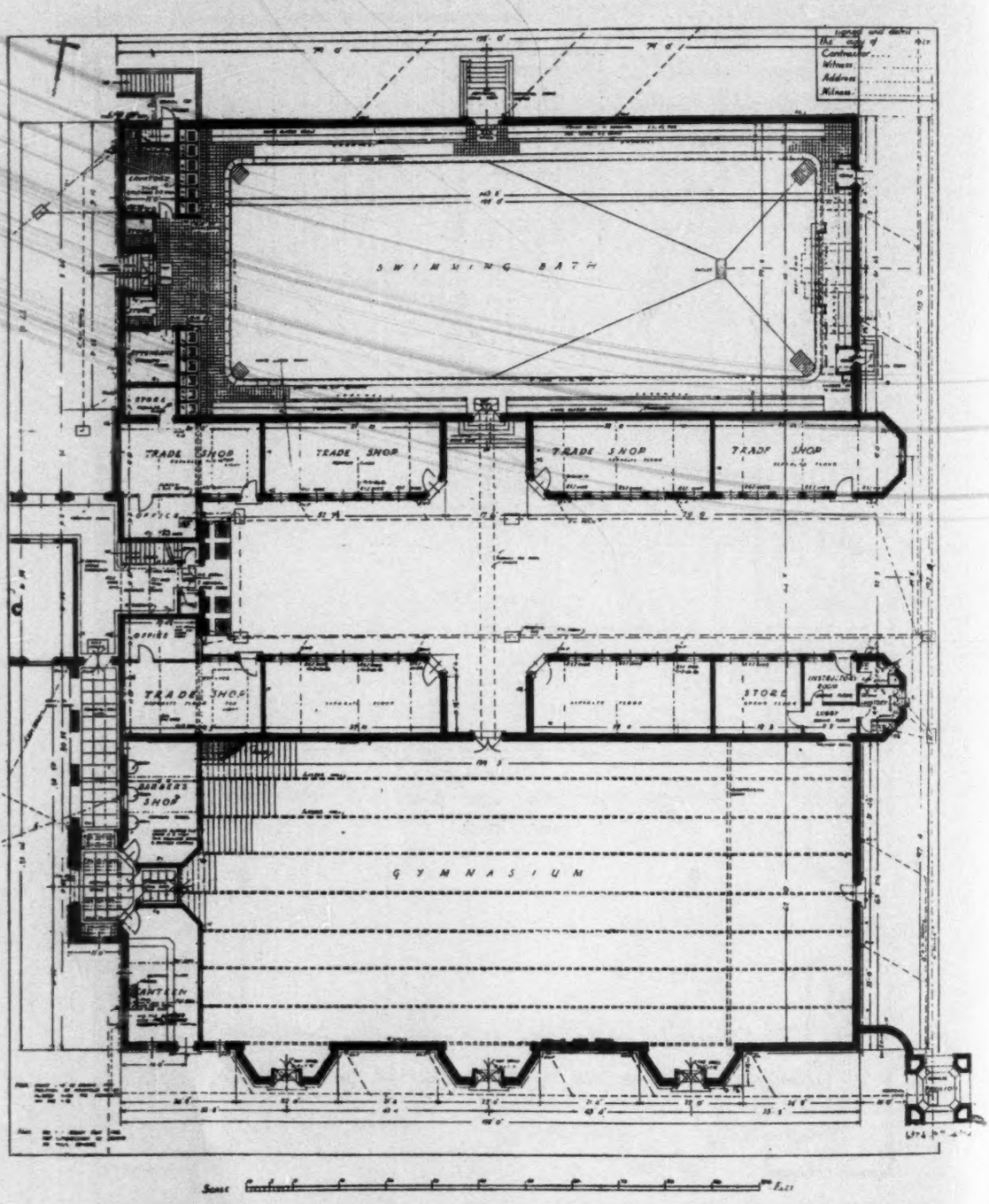
Royal Hospital School, Holbrook, Suffolk: Left Wing of Central Building.

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I.B.A., Architects.



Royal Hospital School, Holbrook, Suffolk.

Messrs. Herbert T. Buckland and William Haywood, FF.R.I.B.A., Architects.

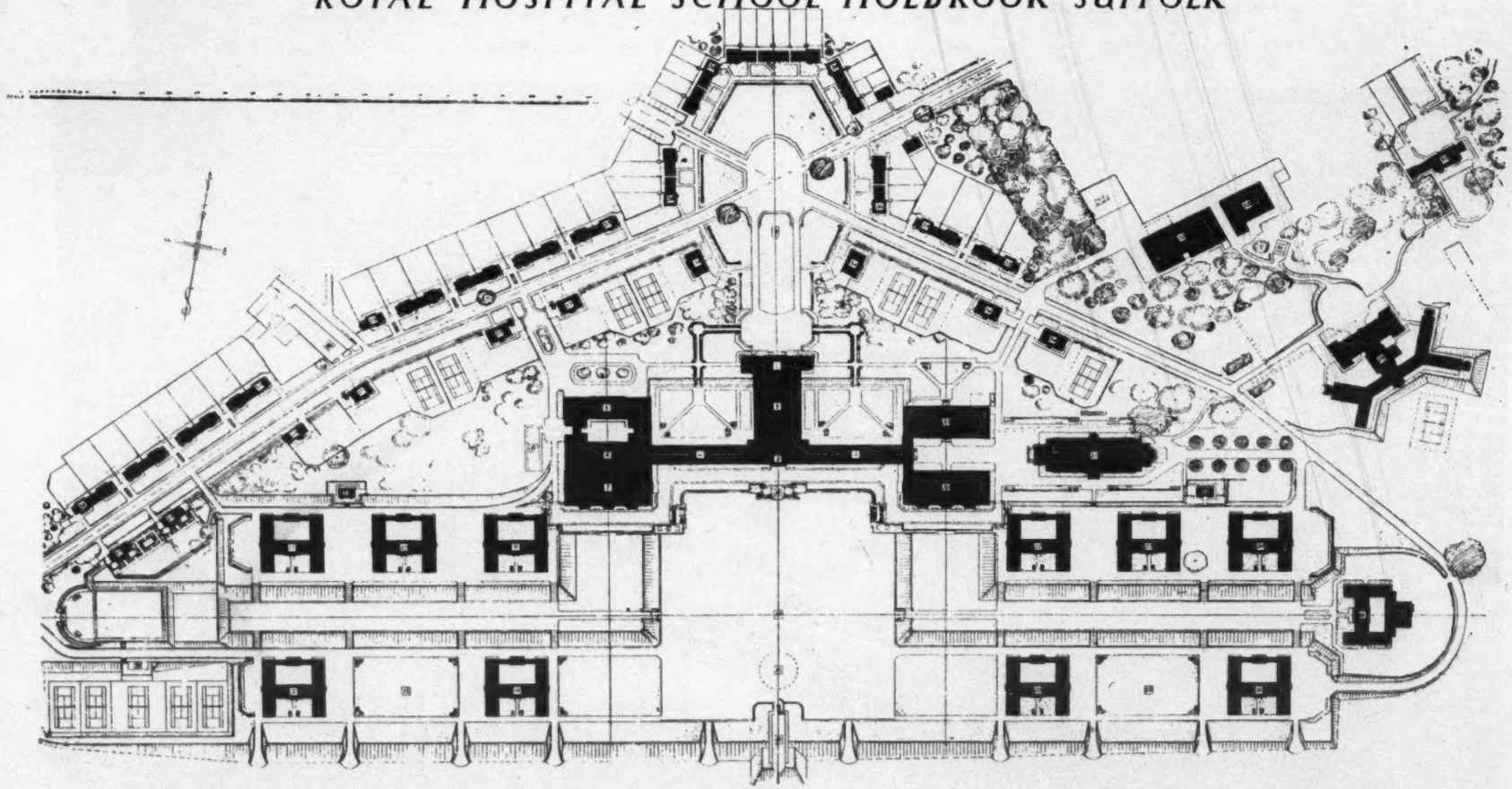


Scale

Royal Hospital School, Holbrook, Suffolk: Right Wing of Central Building.

MESSRS. HERBERT T. BUCKLAND AND WILLIAM HAYWOOD, FF.R.I B.A., Architects.

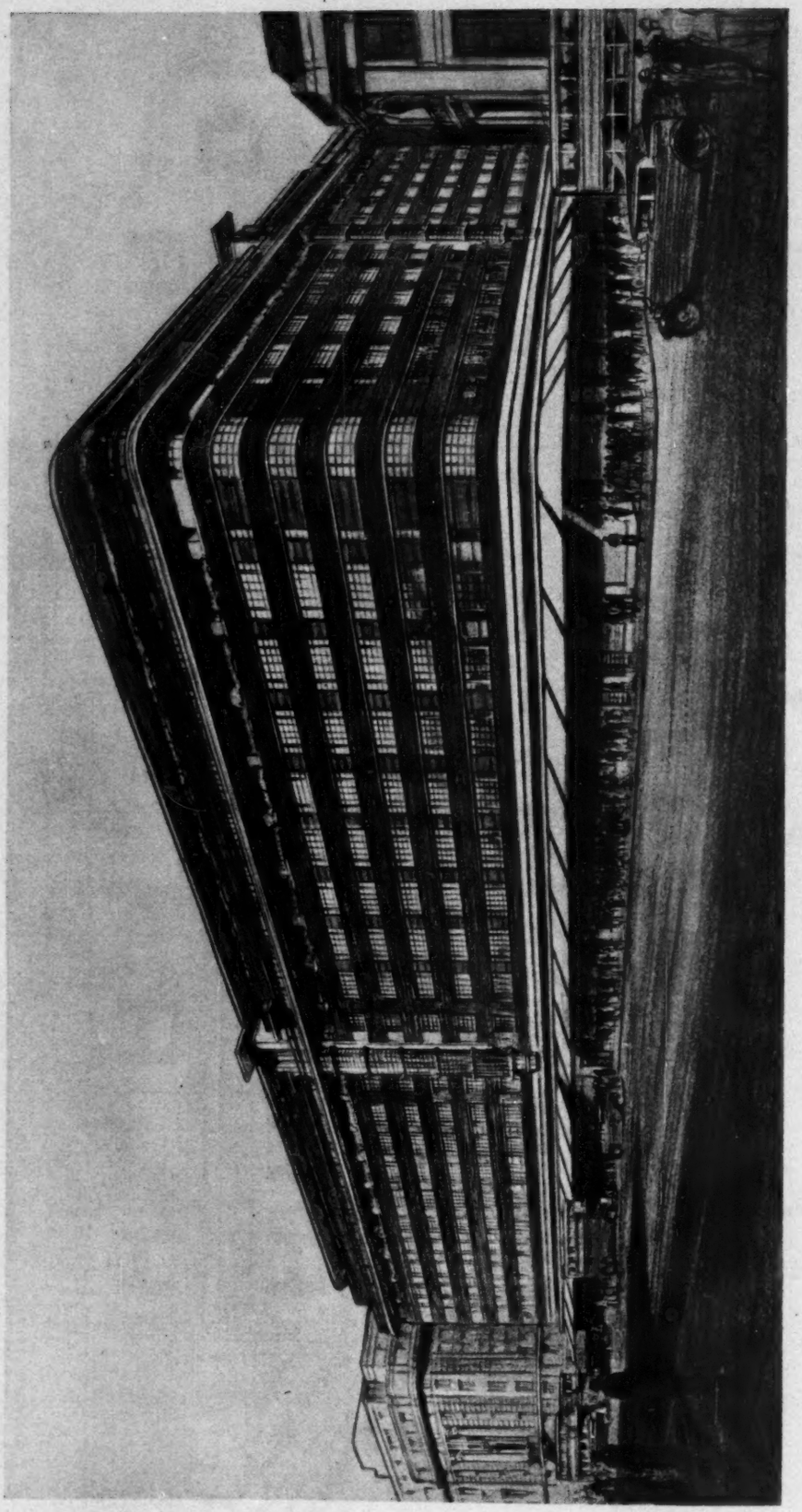
ROYAL HOSPITAL SCHOOL HOLBROOK SUFFOLK



1 Administration.
2 Assembly Hall.
3 Tower.
4 Classrooms.
5 Stores and Bakery.
6 Kitchen and Service.
7 Dining Hall.
8 Manual Training.
9 St. Vincent Hostel.
10 Raleigh Hostel.
11 Drake Hostel.
12 Blake Hostel.
13 Future Hostel.
14 Howe Hostel.
15 Rifle Range.
16 Rigged Mast.
17 Parade Ground.
18 Saluting Base.
19 Gymnasium.
20 Swimming Bath.
21 Chapel.
22 Collingwood Hostel.
23 Anson Hostel.
24 Hawke Hostel.
25 Nelson (Entry) Hostel.
26 Hood Hostel.
27 Future Hostel.
28 Cornwallis Hostel.
29 Infirmary.
30 Superintendent.
31 Mortuary.
32 Laundry.
33 Engineering.
34 Staff Residences.
35 Staff Residences.
36 Staff Residences.
37 Staff Residences.
38 Maintenance.
39 Pavilion.

General Lay-out Plan.

Messrs. Herbert T. Buckland and William Haywood, FF.R.I.B.A., Architects.



Perspective View of New Shops and Flats, Oxford Street, W.

SIR JOHN BURNET, TAIT AND LORNE, FF.R.I.B.A., Architects.

GARDEN FRONT.

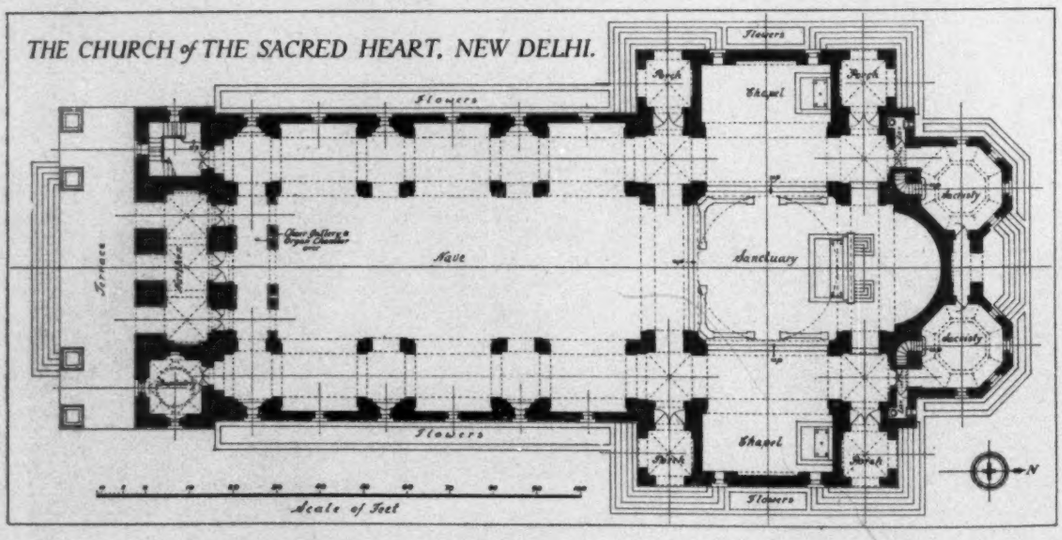
ENTRANCE FRONT.

"Morleys," Great Hallingbury, Bishops Stortford, Herts.

MR. ALEC SMITHERS, F.R.I.B.A. (MESSRS. CAMPBELL JONES, SONS AND SMITHERS), Architect.

R.A. Exhibition, 1933.

View from North-East.



Church of the Sacred Heart, New Delhi.

Mr. Henry A. N. Medd, Architect.

BRITISH ARCHITECTS' CONFERENCE

THIS Conference opened at Cambridge on Wednesday evening, June 21, when a large body of members and guests attended an informal reception in the Hall of Peterhouse as guests of the Essex, Cambridge and Hertfordshire Society of Architects.

The inaugural meeting was held on the Thursday morning, when 400 people were present in the Guildhall to hear Sir Raymond Unwin, President, deliver his inaugural address. The welcome of the town of Cambridge was extended to the Conference by the Mayor, Mrs. F. A. Keynes, who said that, more than any other material element of our social environment, architecture seemed to be a link between the generations. We mostly inhabited survivals of the past, and we were compelled to build for the future. The present was in a state of unstable equilibrium. There was some lack of conviction of what we wanted even for our own time, and experiments in such permanent form had their own risks and responsibilities. In another respect our responsibility to the architectural past and future hampered our present. In that respect the Town Council very much appreciated the fact that they had the Cambridge Antiquarian Society and the Cambridge Preservation Society. Both of them were always ready to co-operate with the Council and give their advice, and their co-operation was much appreciated. Cambridge, as a town, so far as its public buildings were concerned, had to take a modest place architecturally. The future, it was hoped, would see them in more dignified surroundings, but the function of Cambridge had been, and probably would always be, to provide a home for the University, and not to rival it architecturally. The town had done its part in providing master builders and craftsmen. The building trade was strong there, its traditions were good, and its craftsmen were of the best. But it was recognised that it was the work provided by the University and the colleges that had stimulated the trades and made them what they were.

The Inaugural Address.

Sir Raymond Unwin, in response, said that he congratulated the Corporation that, at the moment, the town was not in danger of the swamping of the University by aggressive industrial development, as its sister University was in danger of being swamped.

Speaking on the question of housing, the President said that very valuable returns from the Census authorities as to conditions were being received. It appeared from the 1931 census, taking the separate families in England and Wales, that we were half a million houses, in round figures, worse off than in 1911. That represented something like the deficiency of the War years, which meant that, after all our struggling, we had failed to make any impression on the War deficiency. The deficiency in houses in 1911 was a quarter of a million, and therefore today we were three-quarters of a million short. That had nothing to do with slums or bad housing. In addition to the three-quarters of a million houses required to make up the deficiency, he estimated there were half a million of houses not fit to live in, and another half a million that fell far below any decent standard of accommodation that any of us would set up. How were the needy families to be dealt with, and how were they to be housed—in homes or in warehouses? Some of the modernists in construction and other things were not less prone than the more traditional to make use of false statements in putting forward their ideas of what was required, and that was not the right way to go to work. There was a great deal of talk of housing families in vast steel and concrete warehouses, and of the great economy and urban benefits, whatever they were, in so doing. It might be that the modern man and the modern family would like living in a few cells in a vast pile of biscuit boxes. But that had never appealed to him as his idea of a home. The reasons given for "warehousing" were that we could not afford the cost of cottage homes, we could not afford the space occupied by them, and we could not afford the journeys to and from the places of employment. Was it not ridiculous to talk about shortage of sites when we had the vast acreage of England? People who put up those concrete warehouses always thought they were short of sites. But the fact was we scattered our houses all over the place; we strung them out along roads and made ribbon development. It was not the land we occupied; it was the land we spoilt in scattering our houses and straggling them over the country. We had had to house in London in the last 20 years 647,000 families. If one took a circle of eight-mile radius to include parts of London pretty well built up, it was possible to house all the people at ten houses to the acre within a belt one and seven-eighths of a mile wide. The fact was again that we spilt those people over a belt 10 miles wide, all over London, because we had not had proper planning or control. It was fair to say that we could afford the space, and the cost of homes was not more than the cost of warehouses. It cost us in London £300 per family more for every family we housed in a tenement block in the centre than for every family we housed in a little cottage on the outskirts of London. Again, in tenements nothing yet was known of the conductivity of sound in buildings of that type when used as dwellings. We were told that we could not afford daily journeys to and from work, and there was something in the argument; but it could be asked, was it not better that the family should find work at their doors, that the family should make one journey to the place where the homes of the workers were, rather than that the family should make 300 journeys a year for the rest of their lives?

The problem of the growth of towns was a problem of planning and design, and we had to look at it as we did at other problems of planning and design. We had to think of the purpose behind: if architects were worthy of the name they knew something of the problem of having to think in terms of cubic space, and there they were thinking of families that had got to grow up and cultivate pure relations. They were thinking of homes that would not only give them elbow room, but something that would entwine itself around their heart's affections when they came home, associations that they would carry with them all their days of life. That, in his view, was what the architect could and should give to the future generations.

Cambridge Architects to the 18th Century.

Cambridge architects, from the beginning of the colleges to the end of the 18th century, was the congenial theme of the address of Mr. Geoffrey Webb, of the Cambridge Faculty of Architecture. Though difficult to deal with the great figures of architecture from the 15th century, said the lecturer, it was not as hard as it would be in any other place but Cambridge, for Cambridge and Ely had documents relating to building and designers which were better than the documents similar in character in any other place in England. At that time there was no such name as was to be found at work in 15th-century Oxford. There was the man who was advisor to King Henry VI, whose scheme for King's College was carried out in miniature at Queens' College, but whose great scheme, owing to the troubles, was never completed. His name was possibly Thearsk. He produced his college court in a different way. The type of Oxford was more idealistic, and it was dominated by the mediæval hall and chapel, round which the residential buildings were grouped. In Cambridge the type was more domestic, and instead of great blocks as at New College or Magdalen College, one had the monumental gateway. Sometimes the money was "blown" on hall or chapel, but that was only here and there.

In recent years there had been a revolution against Oxford and Cambridge Gothic. The bright young men, on going down take to journalism, were apt to sneer at domestic Gothic. They called it squalid, and in a sense they were right. It was only the 18th and 19th centuries that had made Cambridge look less squalid. Most of the Cambridge buildings were not mediæval, but Corpus had a few rooms left built on a "mediæval skyscraper" plan, and in those rooms there were alcoves for beds. The undergraduates slept on the floor, and the Don in the bunk. One found the gardens planted with rosemary and lavender for practical reasons in enclosed courts. The first three-sided court in Cambridge was due to Dr. Caius, and Oxford never had one until, much later, it was forced on them. The first of the authentic architects at Cambridge was Ralph Symons, a Hertfordshire man, whose greatest work was the rebuilding of the halls in the remodelling of Trinity College, and the formation of the Great Court. Ralph Symons was obviously an architect of great ability, but his bad end was a warning to architects. He took a partner named Gilbert Wigg, and after they had undertaken to finance the work at St. John's College, Ralph Symons had to leave the town. He (the speaker) did not say it was Symons's fault, but we had to remember that one of the first important architects employed by the University was sent to gaol. There were amongst his successors some possibly one would have liked to have seen in gaol! In Elizabethan times there arrived from Northampton a family named Grumbold. The second architect of that name was there in the reign of King James, and he was certainly an architect. He was succeeded by his nephew, who was Wren's right-hand man, and he finished off some of his uncle's work at Clare. We found Robert Grumbold "pinching" the drawings that Christopher Wren had made, and, twelve years after, building that beautiful bridge of Wren's, and calling it his own. Only recently had the papers of Wren's been found.

Coming to the architects of the type it was the habit of some to sneer at—the amateurs—he had taken round Cambridge Continental architects, and he remembered their intense appreciation of the work of Whitehead and Whitaker in the first court of Emmanuel College. James Burroughes played a part in refacing many of the buildings, ashlaring, particularly, Caius. He was involved with syndicates. The Senate House, a single building, ought to have been one side of a three-sided court. As a result of his troubles with the syndicate, Burroughes got a knighthood, through the Duke of Newcastle, and Wright got the front of the University Library. With his knighthood Burroughes consoled himself with building one of the most charming 18th-century buildings in Cambridge, the Clare Chapel, and died before it was finished. Working with him was a man named Essex, whose work one could see at Emmanuel and in the mediæval court at Christ's. He treated Gothic very seriously, and in him we had the greatest of the Cambridge architects since Symons, the Hertfordshire man, or the Grumbolds from Northampton. King's College had a magnificent design made by the Royal architect. It was never completed, but Henry VIII was prepared to spend money he had seized to his own honour and that of his father, and that work was the second wonder of King's Chapel.

At last the University was convinced that something ought to be done about the slum near the chapel. They called in Wren, and after interviewing him they selected Hawksmoor, and one could see the walls that he put up in the rebuilding of King's. When he went out of fashion, Gibbs was chosen to carry on the work, and he in turn gave way to Robert Adam, who built the amazing block opposite the chapel. He would have put in a circular dining-hall. The domes and lantern cupolas added to Gibbs' building showed the way of the wind. One hundred years on, and the tale was taken up again by an architect, of whom Mr. Beresford Pite would speak.

The Nineteenth Century.

Mr. Beresford Pite continued the story.

The nineteenth century, he said, succeeded to the settled and almost arid traditions of the previous era in the storm of the European War. The position of architecture at the close of the Renaissance era might fairly have been described as awaiting a revival. That that revival came with enthusiastic force was abundantly evident in the cities of the Empire, and specifically in its centres of culture. Cambridge afforded sufficient illustration of the confidence, scholarship and response to contemporary influences which the successive revivals of the nineteenth century produced, and which left us at the opening of the twentieth century gasping for some new adventure in originality. The rediscovery of Greece by archæologists, mostly architects through the initiative impulse of revivalism, introduced the new principle of refinement into architecture with far-reaching effects. The ordered systems of design were retained, but vivified with what was believed to be the Grecian spirit. Downing College by William Wilkins, the young Fellow of Caius, was one of the earliest, and, one might add, the best building of the Greek revival. The affectionate zeal for classical art of the pure, not the Renaissance School, soon gave Cambridge the Fitzwilliam façade by Basevi, and later the great library by Cockerell, a design not without relation to the great addition to Trinity. The dependence of those works of architecture upon exact scholarship for their justification in the detail of design was manifest, and was severely felt when additions had to be made to the original schemes by the moderns. Meanwhile, the revival spirit had laid hold upon the incipient romanticism which burst into activity after the peace of 1815, and enthusiastic study was concentrated on the neglected Gothic art of England. Books of delineated example and Grammars of Gothic were published to enable architects to apply a mediæval clothing to buildings designed upon the systematic plans then fundamentally modern and proper.

The buildings of King's College of the nineteenth century retorted upon its own inheritance of the eighteenth century; for as Gibbs designed to "classicise" the north front of the chapel—in consistent emulation of Inigo Jones's enlightened work at St. Paul's—so Wilkins was authorised on the completion of the false cloister or screen to the Parade to "Gothicise" Gibbs's dignified classic elevation. That such Revivalism was then sincere, courageous and consistent cannot be denied. The progress of the Gothic revival through the propaganda of the Cambridge Camden Society had in the meanwhile revolutionised the ecclesiastical arts of the country. Sir Gilbert Scott, its most important protagonist and the dominating personality of his epoch, bestowed upon St. John's a chapel which we might prophesy future generations would not dispraise. That fine design gave a pervading dignity to the whole of the University. The certainty of its assurance that perfection was ordained in the "Middle pointed" was evident, and even such mistaken certainties should demand our respect. The present-day superiority of taste might well be asked if it could do better.

The Pre-Raphaelites even at that stage of the revival were preaching and practising. Mediæval art was found to be as genuine and capable of elucidation for the then requirements as Greek and its positive use as an equivalent for classic, in all classes of buildings, had been asserted and exemplified. As William Butterfield had invented a Gothic Renaissance Art, virile and progressive for churches, so Waterhouse, with masculine force and Manchester energy, was applying the doctrine that Gothic was a living, not a dead, style to municipal and college buildings. The Union at Cambridge was an early success. The commission of the Balliol building at Oxford resulted, then the Lodge and buildings at Pembroke, which had attracted the admiration of Continental architects as a typical success of English architecture. The Caius building, erected about 1870, solved a difficulty of site and plan in a way that had given that college a uniquely dignified position in the Cambridge ensemble.

It could be recalled that Street's Law Courts in London had by this time brought the revived Gothic to its acme of interest and vivacity, and that Waterhouse, significantly, was moving onward.

Sir Gilbert Scott's son, George Gilbert Scott, sometime fellow of Jesus, in a short time with few works exercised a leader's gifts with designs that were pungently ancient, but powerfully artistic. It might have been predicted in the additions to the front of King's, in the restoration of the northern wing of Peterhouse, the hall of Christ's and at Jesus. He also submitted significant alternative designs for the Divinity School, erected by Mr. Basil Champneys (who must now be the doyen of the profession); one of Scott's designs for the school was pure Gothic, the other a fresh use of later date, like the third Court of St. John's. The addition of Pembroke, however, was G. G. Scott's Cambridge chef d'oeuvre and remained as attractive to-day as when built. The extension of Wren's chapel was also his work, and his intervention to preserve the old Jacobean library was significant of the new care for all old buildings. Bodley, who became the leader in the latter days of the school, practised later Gothic and built the chapel at Queens'. But that a dead end had been reached in revivalism was evidenced by such fads as crazy paving and the indispensable lead glass, and it only remained to endeavour everything, as if architecture could look after herself without the direction of a valid artistic ideal, old or new. The drift towards that freedom from enthusiasm or doctrinal bias could be seen in the large blocks of important buildings which lay, without any general scheme behind Sir T. G. Jackson's big museum—a work that was characteristic of its author's taste for mixtures of scale and detail, but as a whole provided Cambridge with a fine example of Oxford style.

To the two generations of Gilbert Scott to whom Cambridge owed so much, was added a third in Sir Giles Gilbert Scott, whose new building for Clare summed up the progress of the era with a delicious grace. The great Library building must perforce make its own standard when its time came. Emmanuel provided a conspicuous effort to make late Gothic revival effective in the detached building by Leonard Stokes, and Jesus had carried the same ideal further with freedom by Mr. Morley Horder. Sir Aston Webb's buildings at Caius, Magdalen and the Leys School all belonged to the same school of resultant revivalism, and Sir Edward Lutyens's new building of Magdalen still abided. It might be said that the new wonder of modernism with its fever and baldness might yet invade the University, but of that it was useless to prophecy. The search for the new expression in art would need to be reinforced by a studious discernment of the spirit which evoked and accomplished the great buildings of the past.

After lunch, the company assembled at King's College, where the Conference photograph was taken (this photograph was reproduced in THE BUILDER last week for the benefit of the Conference members). After this, members split up into parties for a series of visits to the buildings in the town, re-assembling at the Fitzwilliam Museum, where a reception was held by Mr. Will Spens, Vice-chancellor of the University. Members dined informally afterwards.

The Friday's Programme.

Friday was devoted to a series of whole-day tours by motor coach. Tour No. 1 extended over country which originally formed part of the Wash. Wisbech, March, Walsoken and Chatteris being among the towns visited, under the guidance of Mr. F. Burdett Ward. Tour No. 2 had King's Lynn as objective, but a short stop was made at Ely Cathedral. The return journey was made by Castle Rising, Swaffham and Mundford. Mr. H. C. Hughes was the leader of this party. Tour No. 3 gave excellent opportunities of seeing interesting domestic architecture, largely in Essex. Lunch was taken at Saffron Walden; and Sawston, Thaxted and Audley End House were among the places visited. Mr. N. T. Myers conducted this party. The interest of Tour No. 4, under Mr. Geoffrey Webb, centred largely in a number of fine parish churches, notably St. Neots and Great Paxton. The 14th century palace at Buckden of the Bishops of Lincoln and the Bridge at Huntingdon gave especial pleasure. Those who went under the guidance of Mr. Theodore Fyfe on Tour No. 5, had exceptional facilities for going over Ely Cathedral, which occupied most of the morning. After lunch the drive was continued through the Swaffhams, Burwell, to Earith Bridge and home through Over and Swavesey. Mr. P. C. Blow conducted Tour No. 6, which was principally devoted to an examination of Letchworth Garden City, on which members were accompanied by Mr. Barry Parker, the architect. Ashwell, Baldock and Hitchin were also visited.

THE CONFERENCE BANQUET.

The banquet, held in the hall of Trinity College, on the Friday night, was largely attended. Sir Raymond Unwin was in the chair, and members and guests present included: Viscount Bury, the Deputy Mayor of Cambridge (Alderman W. L. Raynes, M.A.), the Mayors of Colchester and St. Albans, Mr. Peter Giles (Master of Emmanuel), Mr. J. A. Venn (President of Queens'), Professor A. Hutchinson (Master of Pembroke), Mr. J. F. Cameron (Master of Gonville and Caius), Professor A. C. Seward (Master of Downing), Mr. Will Spens (Vice-Chancellor of the University), Sir Hubert A. Sams (Bursar of Peterhouse), Mr. Percival C. Blow (President, Essex, Cambs. and Herts. Society of Architects), Sir Giles Gilbert Scott, R.A., Mr. D. Theodore Fyfe (Chairman, Cambridge Chapter of the Society), Sir Donald MacAlister, Bt., Rev. G. E. Newsom (Master of Selwyn), Professor E. Bullough, Mr. Francis Corby (President, Eastern Federation of Building Trades' Employers), Dr. John A. Pearson (Toronto), Mr. Norman Hurst (Hon. Sec., Cambridge Chapter of the Society), Messrs. W. H. Ansell, James A. Arnott, F. G. Baker, H. P. Cart de Lafontaine, E. J. Carter, Kenneth Cross, Norman Culley, R. Dann, H. H. Dunn, J. Murray Easton, F. C. Eden, Henry M. Fletcher, J. Bradshaw Gass, Hastwell Grayson, Stanley Hamp, F. G. Hicks, A. J. Hope, H. C. Hughes, Gilbert Jenkins, J. Herbert Jones, Arthur Keen, E. Bertram Kirby, Sydney Kitson, H. V. Lanchester, R. Goulburn Lovell, Ian MacAlister, E. J. MacRae, Edward Maufe, H. P. G. Maule, T. R. Milburn, Alan E. Munby, T. C. Nicholas, W. J. Palmer-Jones, Beresford Pite, W. T. Plume, A. N. Prentice, J. C. Procter, Stanley C. Ramsey, T. Taliesin Rees, Ingalton Sanders, E. W. B. Scott, Thomas E. Scott, J. Alan Slater, Alec Smithers, C. D. Spragg, Harold Tomlinson, Cecil Uncher, F. Burdett Ward, Geoffrey Webb, Maurice E. Webb, John Wittet, G. Grey Wornum, and J. Hubert Worthington.

After the loyal toasts, the toast of "The University of Cambridge" was proposed by Mr. D. Theodore Fyfe, F.R.I.B.A., Chairman of the Cambridge Chapter, who referred to two aspects of the University which must, he thought, have struck many who were there as visitors. One of them was the astonishing recent development of the University—apart from its colleges—in many humanistic and scientific ways. The magnificent donations of the Rockefeller Trust and the enlightened generosity of the Courtauld family had, in particular, made possible the splendidly equipped scientific and lecture-room buildings, the new University Library, and the extension to the Fitzwilliam Museum. The other but less obvious thing was the way that Cambridge had wakened up to its dangers from unwise and over-hasty development and spoliation. Encouraged by a kindly University, their modest root of an Architectural School had developed into a healthy, growing plant. It was only right

to add that the generosity of one of the School's oldest friends, Mr. Maurice Webb, had just placed them under an increasing debt by his advancement of the Library of standard old works into a position of commanding importance. What the future had in store in a wider sense the School did not know, but there was a Professor of Fine Art attached to the Faculty of that name, and it was surely not impossible that Professor Roger Fry and his successors in the Slade Chair might be able to give the University the thing that some thought it lacked more than anything else—active recognition of the vital force that existed in Art as one of the great values.

The Vice-Chancellor (Mr. Will Spens), replying, said that he did not think there had ever been a time, a greater or more important period, of building in the history of this University than during the past 30 years. Once more the University was immensely the debtors of the Institute. It would be impossible for him to particularise, however briefly, the work that had been done for the University by British architects, and he would refer only to three buildings. There was the new Library now rising beyond the Backs that was owed to Sir Giles Gilbert Scott, to whom the University had entrusted the greatest task it had ever entrusted to any single architect. The University of Cambridge had far more than ordinary cause to congratulate the Institute on its choice of a new President, and to congratulate the University of Oxford on including him among those it honoured at a recent encænia. The other buildings that he wished to mention were those galleries in which he had had the honour to receive the Conference the day previous, and the new lecture rooms in Mill-lane. They were both the work of Mr. Dunbar-Smith, and he had chosen to mention them alike for their beauty and their perfection of adaptation to their purpose.

The health of "The Royal Institute of British Architects and its Allied Societies" was proposed by Professor Edward Bullough, Hon. A.R.I.B.A. (Chairman of the Faculty Board of Fine Arts), who said that when the proposal to establish a School of Architectural Studies at the University was first mooted and considered by a special syndicate in 1908, the promoters at once worked in close contact with members of the R.I.B.A. The project was supported and helped along by the advice and guidance of representatives of the Institute, whose counsel had been sought on the composition of the curriculum and the standards of the examination. Relations were close and continuous. They could not at times fail to be strained; but he rejoiced to say never were they strained except through misunderstandings. If their friends of the Institute thought that there was another object on which to exercise their paternal solicitude for architectural education, they soon discovered—and, on discovering, handsomely acknowledged—that the Cambridge School of Architecture was not quite of the same kind as others in the country. Indeed, the ideal the University had set their School and themselves, and had pursued not without considerable difficulty as best they could, soon won recognition both for itself and in the essential differences of the School from other places of architectural education. And with that recognition, the criticisms of the periodical visitations from headquarters gained enormously, both in benefit to the School and in sympathy from the Institute. For that help—in part official and in part personal—the School felt a debt of gratitude to the R.I.B.A., to which he would like to add the expression of personal thanks to him who for so long had been his "opposite number" at headquarters—Mr. Everard Haynes.

The President, responding, referred to the fact that the Institute was emerging from two years of fierce fighting with the demon of depression, and if they had been battered in the fight they had not feared the depression. They had gone forward with their work, and the fact that the Institute was embarking on a new building was proof of their faith in the future. He wanted to say that in his judgment the Institute was proving to be as efficient a client as its architect was proving an efficient architect. They had chosen their architect in the regulation manner, which it was hoped every great institution would follow very rigidly. They had given him a free hand, and minor modifications had been made at their suggestion. He (the architect) had given his estimate, and he was happy to be able to say that, although it exceeded £100,000, the tender that had been received, and he believed would be accepted, was within £127 of the estimate.

After expressing the Institute's thanks to the University, various of the Colleges, and the architects of Cambridge, for their hospitality and arrangements which had made the Conference possible, the President referred to a niche in education that, he said, remained to be filled. We trained people to-day to be performers, but we did not train people to watch performance with intelligence. In the University of Cambridge the men were trained so that they were able to write books, and to read books, for that was part of cultural education. And he would say that we should train men not only to build architecture such as was being erected there, but should train also the public to understand what was meant by design; we should enable them to understand what was the constituent of good or bad design; we should teach them what was the design of mere muddle, which was being continued all around us for want of money and of designing. He hoped, said the speaker, that architects as an Institute, and Cambridge as a University, would now feel that it was the next great step to be taken if we were to recover what was our possession and what went to make life pleasant—an appreciation of the beautiful in all that surrounded us.

The toast of "The Town and County of Cambridge" was proposed by Mr. P. C. Blow, president of the Essex, Cambridge and Hertfordshire Society of Architects, and responded to by Alderman Raynes.

The toast of "The Guests," proposed by Mr. H. M. Fletcher in a felicitous speech, was responded to by Sir Donald MacAlister.

A delightful feature at the dinner was the singing of the Trinity Choir.

THE RENT RESTRICTION BILL

The Rent Restriction Amendment Bill has passed the third reading in the House of Commons without any serious amendment, but with the insertion of some new clauses either moved by the Government or accepted on its behalf at the Report stage. The first of these new clauses was moved by the Minister of Health: "If in proceedings for the recovery of possession of a dwelling-house to which the principal Acts apply (not being a sublet part of another such dwelling-house), or for the ejectment of a tenant therefrom, the Court is satisfied that the recoverable rent of the dwelling-house in respect of which the proceedings are taken is not more than 2s. 6d. weekly, and that the landlord, or some person from whom he derives his title, has since the passing of this Act been in possession thereof, section 5 of the Act of 1920 (which relates to restrictions on the right to possession and other like matters) shall not apply in relation to those proceedings." The clause is a little involved, but its effect appears to be that when the landlord has since the passing of this Bill come into possession of these small houses or cottages, which of course would, under the general provisions of the Bill, remain controlled even if the landlord had come into possession, an exception is to be made in their favour, and its intention was stated by the Minister to be to enable the best use to be made by the agricultural world of cottages for agricultural and estate management purposes.

It has to be remembered that under the Housing (Rural Workers) Act, 1926, the operation of which has been continued beyond the period first fixed, assistance by grant or loan can be obtained for reconditioning dwellings occupied by persons whose income is such that ordinarily they would not pay a rent in excess of that paid by agricultural workers in the district, and it is obvious that continued restriction on such cottages would prevent landlords, though in possession, from obtaining the benefits of this Act.

A new clause was moved by Sir R. Gower and accepted by the Government, the effect of which is to modify section 12, subsection (1) (g) of the Act of 1920 so that only a relative *bona-fide* residing with a deceased tenant shall be entitled to continue the tenancy as a "tenant." The precise words of the new clause are not yet available. A further amendment accepted by the Government was a new clause in two paragraphs moved by Sir R. Aske, the effect of which was (a) that where the recoverable rent has been determined by a Court, the Court shall have power either in those proceedings or in any subsequent proceedings to call for the production of the rent book or any similar document and to direct the registrar or clerk of the Court to correct any entries therein showing the tenant to be in arrear in respect of any sums determined by the Court to be irrecoverable, and (b) an amendment to section 14, subsection (2) (b) of the principal Act, which deals with entries made irrecoverable by that Act, or any Act repealed by the Act. Paragraph (b) stands in the Act: "If where any such entry has before the passing of this Act been made by any landlord, the landlord, on being requested by or on behalf of the tenant so to do, refuses or neglects to cause the entry to be deleted within seven days, that person or landlord shall on summary conviction be liable to a fine not exceeding ten pounds, unless he proves that he acted innocently and without intent to deceive." The amendment now accepted is to have application to entries made after the passing of the principal Act as well as to those made before it passed, and for the last words in the existing paragraph are to be substituted the words: "Unless he proves that at the time of making the entry, or of the neglect or refusal to cause it to be deleted, as the case may be, the landlord had a *bona-fide* claim that the sum was recoverable." An amendment moved by Mr. Lyons was accepted to the effect that where a tenant dispossessed occupied part of the premises as business premises, compensation for improvements and goodwill should be given as under the Landlord and Tenant Act. The exact wording of the amendment is not available.

Lastly, an amendment moved by Sir R. Aske was accepted which appears to relate to paragraph (f) in the First Schedule, which renders overcrowding a reason for ejectment without proof of alternative accommodation. The amendment was expressed to make it clear that "the penalties attaching to overcrowding should only apply to conditions within the power of the subtenant to remedy, and should not apply to cases of additions to the subtenant's own family." We quote from the report in *The Times*.

The Solicitor-General was reported in his speech to give the following figures:—The "A" houses now decontrolled represented one-twelfth or so of all the houses at present controlled, whilst the "C" houses represented no less than two-thirds of the houses at present under control, but those two-thirds represented four million families whose houses for a further five years would remain controlled. At the present moment there is considerable agitation to push forward with slum-clearance schemes, and those who favour restriction are also favouring slum clearance; but we doubt whether it is generally realised how much rent control has contributed to the creation of unsatisfactory housing conditions. Landlords deprived of free use of their properties and hedged in with restrictions and subjected to uncertainty have been prevented from improving their property and keeping it in the condition they would have done but for Rent Restriction, especially in these days when the public conscience has been awakened as to the duties of landlords, and it is the class of houses upon which restriction has borne most heavily that is to remain subject to restriction.

REDUCING NOISE IN BUILDINGS

RECOMMENDATIONS TO ARCHITECTS.

With the enormous increase of machinery within recent years in almost every department of life and work, the problem of noise and its reduction has become acute. Special attention has been given to the subject by the Department of Scientific and Industrial Research in its relation to buildings, and the Building Research Bulletin, No. 14, just issued,* contains practical recommendations of considerable interest and value to architects. We give a summary of the report below.

Siting of Rooms within a Building.—After emphasising the importance of making the best possible use of the quiet side of a site, the report mentions that the roof floor above the cornice, if set well back behind a solid parapet, is usually relatively quiet and may be used for important rooms, but the upper floors below the cornice tend to be noisier than the ground floor owing to reflection from opposite buildings and the road paving. . . . Sound insulation is in all cases easier to accomplish at ground-floor level than on the floors above.

Walls which Act as Loud Speakers.—A sound-resisting structure must provide against air-borne noises percolating through interstices of the fabric of a building or through openings, and must also provide against sound transmissions due to a diaphragm action of walls, floors, doors or windows—that is, against a wall or floor acting as if it were the cone of a huge loud speaker. This, the report states, is by far the most important factor causing noise transmission in modern buildings. Thirdly, it must provide against transmission of sound vibrations conducted along or through the structure. The first of these means of entry for sound can be combated by air-tightness, the second by massive and rigid construction, and the third by the use of non-homogeneous structure.

Air-tightness.—The walls and floors of a building should be carefully caulked. Openings for hot-water pipes and electric conduits must be sealed up. In the case of hot-water pipes the seal should be of such a nature that it will give to the thermal movements of the pipes, and also withstand the high temperatures involved; it must not be so rigid as to impart vibration of the pipe to the surrounding structure. Ducts for any purpose must not be driven through carefully insulated walls or floors. Junctions of partition walls with ceilings and with other partitions often develop shrinkage cracks and should be specially blanketed. Experiment shows that a breeze-block partition is considerably increased in efficiency by a coat of plaster, partly, no doubt, because the plaster seals up the interstices.

Diaphragm Action of Windows.—In the case of windows, most of the sound striking the glass is reflected back, but, owing to the low thickness-to-area ratio of the panes themselves (and the window as a whole), that small portion of the sound energy which is not reflected back is able to vibrate the panes and the window as a whole, causing them to act themselves as sources of sound. The heavier and more rigid the window frames and the thicker and smaller the panes, the less the diaphragm effect will be. The use of hard and dense finishes such as plasters, terrazzo and oxychloride (jointless) cement on partitions, ceilings or floors tends to increase diaphragm action.

The Rumble of Heavy Traffic.—Since sounds of low frequency more easily excite diaphragm action, mass and weight are more important when the noises to be excluded are low in pitch, such as the rumble of heavy traffic. Unlike heat insulation, sound insulation cannot be achieved by employing a special material in thin sheet form, because the membrane effect may still be predominant. If the benefit of mass cannot be taken advantage of, then reliance must be placed upon a carefully sealed partition of composite structure in which the maximum use is made of "air space" not bridged or bridged at as few points as possible, and of materials of dissimilar elastic properties. "The fact remains," the report continues, "that very few of the special partitions, when isolated and tested under laboratory conditions over a wide frequency scale, show themselves to be equal in efficiency to a 9-in. brick wall; many, indeed, are found to be no more efficient than a solidly built 4½-in. brick wall."

Conduction of Sound.—Transmission of sound vibrations along the fabric of a building may cause disturbances very remote from the source of vibrations. In this respect a particularly objectionable feature of modern construction is the continuity provided by hard and dense wall and ceiling plasters and "jointless" floors; the subdivision of these hard finishing materials into separate squares, as is now the practice in regard to some jointless floors, minimises the objection. Traditional, heavy masonry construction, with floors and partitions of materials quite different from those in the wall fabric (which in itself is heterogeneous in nature) is thus less liable than frame construction to trouble arising from conducted sound.

Steel-framed and Reinforced Concrete Structures.—In the case of a steel-frame structure it is possible by means of anti-vibration mats under stanchions, and the insulation of joints at bearings, to do something to introduce discontinuity in the actual frame itself. Moreover, the steel frame is normally clothed for protective purposes in material of somewhat different elastic properties, and this serves to some extent to provide discontinuity between the skeleton and filling membranes such as panel walls. In the case of the reinforced concrete frame structure, it is obviously more difficult to introduce discontinuity in the actual frame, and the skeleton is often monolithic with the filling membranes. It follows, therefore, that the reinforced concrete frame structure, when employed for such buildings as hospitals, flats and hotels, in which mechanised equipment is unavoidable, presents a particularly difficult acoustic problem.

Machine Noises.—The report stresses the great need for improving the silent running of machines and apparatus used in the equipment of modern buildings, and urges architects to encourage research and progress in this direction by making it clear to manufacturers that silent running is a quality of the first importance. Ventilation fans, electric motors, rotary pumps, lifts and lift gates, sanitary fittings, refrigerators, and office machines are all, it is stated, often quite unnecessarily noisy.

Noisy Corridors.—Corridors having hard floors, tile dados and hard plaster finishings to walls and ceilings, frequently act as magnifiers and conductors of noise over a whole building. Such corridors should have baffle doors at intervals, or should be specially treated with an absorbent material. Generally speaking, wood dados and lime plaster walls and ceilings are less noisy. The noise originating in rooms will not build up to the same intensity if sound-absorbing material is employed on the bounding surfaces; the usual finish of paint over hard plaster magnifies the noise disturbance resulting from the normal usage of a room.

Open Windows and Noise.—"It is impossible," the report states, "on noisy sites to defend buildings against traffic noises unless the principle of closed windows is accepted. Large open vents in a window admit as much noise as an open window itself. The ingenuity of ventilating engineers should be enlisted in solving these difficult problems. If air is to be drawn in from a noisy site it should traverse a duct having a large area of sound-absorbent baffles arranged in it.

Practical Data.—To illustrate the practical usefulness of the report, it may be stated that it includes in tabular form the information available concerning 121 various types of structure (each illustrated by a diagram) and materials as regards their efficiency in reducing air-borne sounds when used for partitions, floors, etc. For use with this table the report also contains an intensity scale of common noises and typical localities reproduced from various authorities.

Standard Rooms and Localities.	Intensity above Threshold in Decibels. ↓	Common Noises.
	—120	(Threshold of feeling).
Aeroplane Cabin	—110	Aeroplane Engine at 10 ft.
Printing Press Room...	—100	Express Train at 12 ft.
Tube Train	—90	Pneumatic Drill at 20 ft.
Typing Room	—80	Motor Horn at 20 ft.
Fairly Noisy Restaurant	—70	Average Busy Street, London.
Ordinary Room with Conversation... ...	—60	Loud Conversation.
Fairly Quiet City Office	—50	Average Quiet Street, London.
Average Suburban House-Room	—40	Quiet Conversation.
Very Quiet Room	—30	Average Quiet Street, Suburbs.
	—20	Whisper, at 4 ft.
	—10	Rustle of Leaves in Slight Breeze.
	—0	(Threshold of Audibility).

Fig. 1.—Decibel Scale of Standard Noises and Localities, sometimes called the "Sensation" Scale (from various authorities).

The Decibel Unit.—The above scale expresses the various intensities in terms of "decibels." In explaining the meaning of this unit, the report points out that the human ear is capable of functioning over a scale which ranges in intensity from one to a million millions. This enormous range makes it inconvenient to compare sounds by the ratio of their actual intensities. Moreover, investigation has shown that the response of the human ear is roughly proportional, not to the absolute magnitude of the intensity of a sound, but more nearly to the logarithm of this quantity. For example, sounds of intensity 10, 100 and 1,000 will produce in the ear sensations proportional to 1, 2 and 3 respectively. The decibel scale expresses this fact, and these particular sounds would be represented by 10, 20 and 30 decibels respectively.

It is possible to use the reduction values given in the table in the report to estimate the magnitude of sound transmitted through a partition. If, for example, a noise of loudness of 80 decibels is transmitted through a partition whose reduction is 45 decibels, the noise transmitted will have a loudness of 35 decibels. The report further points out that the annoyance caused in a room by intruding noise depends on the level of sound already existing in the room. It is stated that a noise will be noticeable if its loudness is 15 decibels or less below the level of the existing noise in a room. The amounts of noise which can be readily tolerated in different kinds of rooms are given as follows:—

	Decibels.
Studios for the recording of sound, as talking picture studios ...	6 to 8
Radio broadcasting studios ...	8 to 10
Hospitals	8 to 12
Music studios	10 to 15
Apartments, hotels and houses ...	10 to 20
Theatres, churches, auditoria, classrooms and libraries	15 to 25
Private offices	20 to 30
Public offices, banking rooms, etc.	25 to 40

* Summary of Building Research Bulletin No. 14, "The Reduction of Noise in Buildings: Recommendations to Architects," by Hope Bagenal, A.R.I.B.A., and the late P. F. W. Barnett, A.R.I.B.A. Published by H.M. Stationery Office, 9d. net.

NEW PUBLIC WORKS

"The industrial depression, as is evident from the figures relating to unemployment," says Mr. Geo. Hicks, M.P., General Secretary, in the twelfth annual report of the Amalgamated Union of Building Trade Workers, "continued during 1932 in unabated deadliness. As far as our own industry is concerned," he goes on, "the most formidable contributor to the slump was the National Government, which pursued its 'economy' policy of stopping house building, bridge and school building, and the public works of local authorities with relentless and idiotic determination. The Government was undoubtedly directly responsible for throwing thousands of our members into the ranks of the unemployed, and in consequence has cost the Union many thousands of pounds." This stringent criticism has been borne out by facts, the last figures issued by the *Board of Trade Journal* show the April figures for building, excluding housing, to be 25 per cent. down on the previous month's figures, in themselves considerably worse than the average over 1932. We are glad to state that certain new proposals, detailed hereafter, are on the way, but many more schemes are needed.

Brighton.

A proposal for a new Town Hall for Brighton was approved on June 22 by the Brighton General Purposes Committee, which comprises all the members of the Council. The hall is estimated to cost £250,000. In its construction it is proposed to demolish the present Town Hall and adjacent property so that the new building will have a sea frontage.

Cambridge.

At a special meeting of the Cambridge Town Council it was decided to ask the Ministry of Health for permission to raise a loan of £100,000, so that the essential parts of a scheme to rebuild the Guildhall could be started as soon as possible. Plans have been prepared by Mr. C. Cowles-Voysey, F.R.I.B.A., 14, Gray's Inn-square, W.C.

Cardiff.

The tender of Messrs. E. D. Winn and Co., Ltd., 36, Wilton-place, S.W.1, has been accepted for the building of the new Tuberculosis Hospital at Hayes Farm, Sully, near Cardiff. The price was £151,397. Work will proceed at once. The architects are Messrs. Pite, Son and Fairweather, 12, Carteret-street, S.W.1. The work is for the Welsh National Memorial Association.

Co. Carlow, Ireland.

The Carlow Co. Board of Health has adopted a report from Messrs. McDonnell, Dixon, and Downes, architects, in connection with the scheme to centralise the hospitals of the County, which provides for a County Home for 250 inmates, general hospital for 50 patients, clinic for outdoor patients, fever hospital for 36 patients, sanatorium for 28 patients, kitchen, laundry and stores, mortuary and chapel, mechanic's and porter's houses and disinfecting chambers, at a total cost of £191,500, exclusive of the cost of taking down old buildings (the workhouse) and purchase of site.

Fulham.

The Borough Council propose the erection of a public convenience at Putney Bridge, and are now inviting tenders, returnable by July 11.

Liverpool.

Fifty-four tenement dwellings are proposed by the Corporation on a site in St. James's-street. Tenders must be returned by July 19.

Machynlleth

Machynlleth is to have a new cottage hospital, costing about £7,000. It will be a substantial building, including the usual wards, a maternity wing, an operating theatre, and accommodation for the staff.

Manchester.

The Manchester Town Hall Extension Committee has passed a resolution recommending the City Council to proceed with the erection of the proposed extension to the Town Hall on the site between the present buildings and the new Reference Library. The work, which will take some three years to complete, will, it is now estimated, cost £600,000. The architect of the extension is Mr. Vincent Harris, 29, St. James's-square, S.W.1.

Preston.

Preston Town Council has received formal sanction for the borrowing of £6,281 for the erection of the new Greenlands Council School. This is to satisfy the demand from a new housing estate at Ribbleton.

Reading.

Tenders, returnable by July 15, are now being invited for the erection of 206 houses on the Whitley Estate, Reading, by the County Borough. Plans are by the Housing Architect.

St. Pancras.

Mr. A. J. Thomas, F.R.I.B.A., has been appointed architect for the new Town Hall which the St. Pancras B.C. propose in Euston-road. It is proposed to spend £53,000 upon the purchase of the site.

The Midland.

An hotel building programme, involving a considerable capital outlay, is announced by Mr. Arthur Towle, Controller of the L.M.S. Hotel Services. The company have had under consideration for some time plans for rebuilding the Queen's Hotel, Leeds, and it is possible there may be a new hotel at Euston, too. In the latter case plans entirely depend on a final decision as regards the actual position of Euston Station. The company are also rebuilding the North Stafford Hotel at Stoke-on-Trent, with eighty bedrooms.

Tynemouth.

The Corporation has determined to utilise the various parts of the sea front, banks and foreshore to the fullest and best advantage, and to spread its plan of development over the whole length of the sea front, up to and including Cullercoats. The development scheme includes the extension of already fine promenades into a marine drive, the erection of sunshine bungalows and the provision of a sun-bathing station, and the construction of another bathing pool. Cullercoats Bay is partially enclosed by two piers, and it is proposed to extend one of these piers landwards to make a bathing place, retaining in the enclosure all the natural facilities of a plage and beach, with the background of sea banks suitably laid out in walks and terraces. On the Grand Parade there is land available for the erection of modern boarding houses, hydros and hotels, and the Corporation is prepared to encourage the construction of buildings of this type.

Wallasey.

The Corporation is to proceed with the erection of an open-air swimming-bath at New Brighton. A café and six shops are included in the scheme. Tenders are now being invited, returnable to the Borough Engineer, by July 12.

Public Works, New South Wales.

The Report of the Department of Public Works, New South Wales, for the year ended June 30, 1932, indicates that during the year the Government Architect's Branch expenditure was £157,324. A considerable amount of work was contemplated, a great proportion being for buildings in connection with mental hospitals, for which, at the time the report concluded, plans to the value of £134,000 were under preparation. Under the Education Department, contracts to the value of £461,720 were let, and sketch proposals dealt with a further estimated expenditure of £1,058,910.

SOCIETIES AND INSTITUTIONS

MANCHESTER SOCIETY OF ARCHITECTS.

The first of this year's summer visits of the Manchester Society of Architects to places of architectural interest, held on Saturday, June 24, was to Liverpool, when the Corporation flats and housing schemes, and two suburban churches were seen. Mr. L. H. Keay, F.R.I.B.A., the Director of Housing, had arranged a most interesting itinerary for the party, which included a visit to the most modern blocks of flats, now in process of building, and a tour through the Pinehurst, Norris Green, Highfield and Dovecot Estates. On these estates the visitors were able to observe the development of the design of housing estates in a harmonious and interesting manner, and the way in which the natural features had been utilised to give character to the estates. Several of the enclosed courts, the shopping centres and other local points receiving special treatment were particularly admired.

The visitors then went on to newly completed blocks of 260 flats at Speke Hill, Garston. This is a dignified scheme, where large five-storied blocks and small two-storied buildings are combined with excellent effect. In the course of the tour the churches of St. Columba and St. Christopher, by Mr. B. A. Miller, A.R.I.B.A., were also visited, and the party were interested to see how the problem of the inexpensive housing estate church, combining successfully with its surroundings, yet retaining its ecclesiastical character, has been solved.

Before the party dispersed, Mr. Adamson, the President of the Manchester Society of Architects, expressed the party's thanks to Mr. Keay and Mr. Miller.

THE PRESERVATION OF THE COUNTRYSIDE.

At the opening of the "Beautiful Britain and Scenery of Wales" Exhibition at the Lesser City Hall, Cardiff, on June 17, Mr. B. S. Townroe, M.A., J.P., Hon. A.R.I.B.A., said that Wales was more fortunate than many English districts because so much of the country was still entirely rural. Cardiff, thanks to the Marquis of Bute, and local foresight, had given a lead in creating a civic centre. Cardiff had been described by Mr. H. V. Morton as "the only beautiful city that has grown out of the industrial revolution." In town-planning the Cardiff Rural District Council was doing excellent work, and had recently had a scheme approved, which proved how much could be accomplished by means of negotiating ability and tact, especially with owners. Yet in Wales there was much to arouse anxiety. Why should manufacturers of dog biscuits be allowed to advertise their wares on one side of the River Dee, spoiling the wonderful view from Llangollen Bridge? Why on the way to Snowdonia did we find gigantic hoardings announcing the succulence of certain brands of cocoa, coffee and soup? Why in a well-known holiday resort, where the pre-War houses had roofs of grey slates and were colour washed, did we find ugly villas roofed with salmon-pink tiles imported from France, and built of cheap red bricks brought from Belgium? Why did we find in some churchyards glaring white marble imported from Italy instead of memorials of local stone? Why did not more Welsh magistrates follow the example set at Haverfordwest, where a hawker, who was found digging up quantities of ferns for sale, was fined? Why were so many Welsh County Councils apparently unaware of the value of wise regional planning? In conclusion, the speaker asked his audience to remember that the great landlords of the past, like the Bedfords in London, and the Butes in Cardiff, had given them their rich heritage. Their duty to the future, as the King said only a few months ago, "is to guide and control." His Majesty had put guidance before control and that was the true order of planning.

ROYAL SANITARY INSTITUTE'S CONGRESS

ENGINEERS AND SURVEYORS.

THE 44th Congress of the Royal Sanitary Institute was begun at Blackpool on June 20, when the inaugural address was given by the Rt. Hon. Lord Cozens-Hardy, the President. Following that, on the Tuesday and Wednesday conferences were held on health and medical subjects, under various Presidents. On Thursday, the Conference of Engineers and Surveyors opened, under the presidency of Mr. Thomas Somers, M.Inst.C.E., who, in his presidential address, made special reference to the housing problem. That, he said, was not yet solved. While much had been done, much still remained to be carried out, particularly in connection with slum clearance and overcrowding, and in considering that aspect of the problem, it would, he thought, be necessary to have in view the provisions of the Town Planning Act of 1932. It did appear that, so far as built-up areas were concerned, the provisions of the Housing Act of 1930 and the Town and Country Planning Act of 1932 would require to be carefully considered by the various authorities if the best results were to be obtained. The powers contained in those Acts should be considered as complementary to each other, and not as separate measures. The standard Code of Practice for the use of structural steel in the erection of steel-framed buildings had been put into operation during the past year, and that Code of Practice was now embodied in the British Standard Institution's specification. Universal adoption of that Code was to be recommended. With regard to the erection of reinforced concrete structures, it is desirable that a similar code of practice should be forthcoming as early as possible. At the present time a great deal of unnecessary confusion and vexatious delays were taking place in connection with the design of reinforced concrete structures, due in great measure to lack of uniformity in the standards adopted by the various authorities for the design of such structures. It was to be hoped, therefore, that the recommendations of the committee that had been appointed to report on a code of practice for reinforced concrete design, on the lines of that already in existence for steel structural designs, would be forthcoming at an early date. Electric welding of steel girders and steel-framed structures continued to make progress, and its general adoption would probably require, at an early date, some standard of practice to govern that method.

In road works, many important schemes, involving road widenings, construction of new roads, and reconstruction and strengthening of existing weak bridges, had been held up on the grounds of the need for economy. There was no doubt that much of the work, particularly that dealing with the reconstruction and strengthening of bridge works, would require to be undertaken at a comparatively early date, and it would appear to be desirable that the plans should be fully matured in order that the authorities might be in a position to put the works out to tender so soon as they were in a position to do so.

Development of Seaside Towns.

A paper on "Some Special Aspects of a Surveyor's Work in a Seaside Town" was read by Mr. L. St. G. Wilkinson, M.C., M.Sc. (Borough Engineer and Surveyor, Wallasey). In a sea-girt country such as England, said the speaker, where no place was more than one hundred miles from the coast, the annual seaside holiday had naturally become a family institution. Our shores were liberally besprinkled with holiday resorts both large and small, each and all providing some special feature to attract the visitor and likewise to induce the permanent resident to make his abode in their midst. For this reason it was the responsibility of those in whose hands the local government of such places rested to do everything possible to preserve and increase the advantages and amenities of their town, and that applied to none more forcibly than to the engineer and surveyor. In a seaside town the duties of the latter were more varied and enthralling than in any other place, for they combined the hard facts of man's struggle against the forces of Nature with the romance of successful achievement. The speaker then mentioned some points in the development of coastal resorts, illustrated with special reference to Wallasey. The development of a coast line was in itself a huge responsibility, and it fell to the lot of the surveyor of a coastal town, particularly one having the character of a seaside resort, to guide and control its growth for the benefit of the community. That was an easy phrase, but its practical application was hedged in with difficulties.

Municipal Engineering in Blackpool.

A paper on "Progress in Municipal Engineering in Blackpool," by Mr. Francis Wood, M.Inst.C.E. (Borough Engineer and Surveyor, Blackpool), completed this section of the conference. After describing various works, the speaker dealt with the Blackpool town-planning scheme. The ownership of land in Blackpool was, he said, in the hands of numerous persons who developed their own areas to suit themselves, and had but little consideration for neighbouring lands or for lines that would be of advantage to the town; a town-planning scheme was eminently desirable. It had been a very onerous task, but it must be said that, even though it had taken seven years to develop the scheme and free it from objections, the proposals had been met with general acceptance, it being realised that the proposal was being put forward on such a scale and on lines that would be to the interest not of the town only, but to the owners themselves. It was now completed and in operation. During the past 14 years the expenditure on public works had been very great, and it might be the case that some surprise was expressed that the rates were as low as 7s 6d. in the £. It was accounted for by the fact that the growth of the town in rateable value had had its effect in keeping pace with the expenditure, together with the advantages of the betterment principle and the consequential results of higher standard of road construction involving lower maintenance costs, and similar conditions applying in other departments. Many of the works were, to a considerable extent, put in hand to assist in solving the problem of the unemployed. At some periods the number of workmen engaged had been up to 2,000 (mainly on the works involving capital expenditure), and it was with regret the Corporation had had to discharge men in large numbers who had given excellent service, were capable and fit, especially at a time when there was displacement taking place throughout the country. Mechanised labour and mass production on a scale that the world cannot absorb was probably to a considerable extent responsible. What was to happen to the future of local authorities was difficult to imagine or foretell. It might prove that mechanisation was before its time, or the world was not in a position to absorb the results, and therefore it might not be so advantageous in reducing costs if the displacement of labour was to be a charge on the rates and they had to be paid for doing nothing, or on a lower scale which would deprive them of purchasing power and have a lowering effect on their physical and mental powers.

ARCHITECTURE, TOWN PLANNING AND ENGINEERING.

This conference opened on Friday, June 23, under the presidency of Professor L. P. Abercrombie, head of the Department of Civic Design, University of Liverpool. The first paper read was by Mr. L. H. Keay, F.R.I.B.A., Director of Housing, Liverpool, who dealt with "Slum Clearance and Rehousing." To clear large areas of insanitary properties and leave the sites vacant was, said the speaker, a procedure which could scarcely be satisfactory unless there was definite evidence that redevelopment for other purposes was desirable and possible in the interests of town planning. The particular needs of each district would decide the form of rehousing accommodation to be provided. In the small town the single family house would prove to be the cheapest and most ideal method of housing the dispossessed. With the existing subsidies under the Act of 1930 suitable accommodation could be provided at low rents. In the larger towns and cities it would be usually found necessary to provide some cottage accommodation on the outskirts and to rehouse on the cleared sites in the form of flats at densities of fifty or sixty to the acre. Despite the prejudice against tenement buildings, both as regarded cost and an assumed loss of privacy, the advantage which that method afforded of providing adequate open spaces between the blocks of flats was readily appreciated. Reference to a recent survey of any large city in which a clearance had been made and tenements had been substituted for separate family houses gave a very clear indication of how the area had been opened up. The objection to tenement schemes on the ground of cost was less reasonable than a few years ago. It had now been clearly shown that costs could be considerably reduced, and that accommodation in the form of flats, including the lay-out of the site and the provision of playgrounds, need not exceed the cost of similar accommodation in the form of single family houses by more than 25 per cent. Having regard to the benefits which arose from the opening up of previously congested areas, many would consider that the slight increased cost was more than justified. In fact, it frequently led to savings in other services provided by the local authorities and to a reduction in the number of roads on the area dealt with. The progress of housing in the past had been retarded, concluded the speaker, by the frequent changes in legislation. If a guarantee could be given for the retention of the present subsidies under the Housing Act of 1930, local authorities would feel safe in planning ahead with a view to clearing the slums in the next five, ten, or fifteen years, according to the measure of the work to be undertaken.

Town and Country Planning.

A paper on the Town and Country Planning Act, 1932, was then read by Mr. Samuel Hill, Chief Town Planning Assistant to the Town Clerk of Manchester, in which were summarised the principal provisions of that Act. With regard to the fact that many local authorities would be faced with the problem of the redevelopment for residential purposes of many of the areas cleared under the provisions of the Housing Act, 1930, the speaker suggested that it would be to the advantage of local authorities in dealing with unhealthy conditions under the Housing Act, 1930, to couple with their activity under such Act the preparation and enforcement of a plan for the redevelopment of the whole of the town area, so as to ensure that conditions would not be recreated only slightly better than those previously existing. He believed that the suitable redevelopment for housing purposes of many of the decayed housing areas in relation to cities and large towns, together with the fact that the maximum population of this country would be reached about the middle of the present century and thereafter decrease, raised the interesting question as to whether the outward trend of population would not considerably decrease when the internal areas came to be dealt with scientifically in relation to the replanning of the towns as provided by the new Act. With regard to the developed areas lying beyond the areas immediately adjacent to the cores of the cities and large towns, planning schemes would enable local authorities to prevent the deterioration in residential areas by the gradual intrusion of forms of user detrimentally affecting those areas.

This section concluded with a paper on the "Reclamation of Mersey Foreshore for Promenade at Otterspool." by Mr. J. Rawlinson, M.Eng., Assoc.M.Inst.,C.E., A.M.I. Mech.E., Assistant City Engineer, Liverpool.

NOTES ON CURRENT LAW CASES

THE LAW OF LIGHT

THE case Smith *v.* Evangelisation Society (Incorporated) Trust, heard by the Court of Appeal in February, has already been briefly reported in our columns (May 26, 1933), but as it is now fully reported (1933, 1 Ch., 515) it may be well to consider some of the points raised, especially as the Master of the Rolls intimated that in his opinion the case raised a point upon which there was no direct authority.

The facts are not very clearly stated, as the room the light to which was in question had, up to about the year 1905, been part of a building, but with no roof and no wall at its western end, and it is not clear at what date the window at its eastern end, the subject of the action, was in fact erected, but from the judgments and the report we think the following facts will enable the points raised to be appreciated: The commencement of the period of prescription was taken as 1912 or 1913 (which of the two dates was exact was said to be immaterial). At that time the room which formed part of the east end of the plaintiff's building on the first floor and which measured 19 ft. in breadth from east to west and 24 ft. in length from north to south, was lit on the east side by a window containing a superficial area of 30 sq. ft., but the west side of the room was open for its entire length from floor to ceiling. At the east side of the building across a narrow passage was a hall owned and occupied by the defendants. At this time there were also two skylights running across the room from the roof-ridge to the eaves in nearly half the roof. During the period of prescription the plaintiff had made the following alterations in the room: In 1916, the opening in the west side was partly closed with corrugated iron sheeting, and in 1924 the skylights were abolished and the remaining portion of the west side was closed, but a window, and door with glass panels were placed in the portion when closed, and the window to the east, which had been triangular, was enlarged by being made rectangular, to the extent of 13 sq. ft. It may here be mentioned that to the west of the plaintiff's premises and adjoining them some 60 ft. away from the building was a site which might be built upon in the future.

In July, 1931, the defendants had erected a screen between their hall and the plaintiff's premises, which blocked out the light coming to the east window, and the writ in this action was issued April 20, 1932. The expert evidence on behalf of the plaintiff, which was uncontradicted by any evidence on behalf of the defendants, may be summarised as follows: (1) That under existing conditions the room had sufficient light from the west although there was practically no light derived from the east; (2) that, if in the future a building 62 ft. 6 in. were erected to the west of the plaintiff's premises, then the room, as it then was without skylights, would not be sufficiently lighted for ordinary purposes; (3) that if the west wall which had been erected was removed, the effect would be immaterial, for the light coming through the window looking west was substantially as much as though the whole wall were of glass, and (4) that if the west wall were entirely demolished and the hypothetical building of the above height was erected and the two skylights were replaced (or others giving the same amount of light), the effect of the obstructing screen would be to leave the occupants of the room with sufficient light anywhere near the west window, but to make them on the eastern end rely almost entirely on the skylights. Mr. P. J. Waldram, giving evidence for the plaintiff, added that whilst skylight illumination is sufficient for many purposes, it is unsatisfactory for some others, particularly clerical work, but were the skylights reinserted, this room would have sufficient light for the ordinary uses of mankind.

The Court below held that no nuisance had been proved and that the action failed. The Court of Appeal affirmed this decision, and we propose briefly to refer to the judgments there delivered. In the first place we may point out that in the above evidence of Mr. Waldram, clear effect was given to the doctrine expressed by Lord Lindley in Colls *v.* Home and Colonial Stores (1904, A.C. 179) that, although light from other sources must not be disregarded, that light to which a right has not been acquired by grant or prescription, and of which the plaintiff may be deprived at any time, ought not to be taken into account. The case was treated on the basis that some diminution of the light from the west might be sustained in the future.

The main features of the case which appear to us to require notice are the following: In the first place the Court below had decided the case to a great extent upon the principle laid down in Ankerson *v.* Connelly (1907, 1 Ch. 678; *The Builder*, May 4, 1907), the effect of which may be gathered from the following passage in that case from the judgment of Lord Gorell (then Lord Justice) in the Court of Appeal, the defendant in that case being the owner of the dominant tenement. "The result is, therefore, that before these alterations on the dominant tenement, the erections which the plaintiffs put up would not have been a legal interference with the rights to light of the dominant tenement; and although, as matters now stand, some light would in fact be cut off by blocking up the space which is left after the alterations which have been made by the defendant, the alterations cannot in fact affect the plaintiffs' rights, because they had that right before to block up to that extent." Now in that case the right to the aperture in question had been fully acquired by prescription for 20 years, whereas in the present case the skylights had only been in position for some 18 years and had ceased to exist before the right to light to the east window had been acquired by the prescriptive period, and it was contended that this differentiated the case from Ankerson *v.* Connelly.

The Master of the Rolls in his judgment said that there was really no trace in the reasoning in Ankerson *v.* Connelly that the decision depended upon the complete acquisition of the right to the lights, whilst Lord Justice Lawrence thought that case distinguishable from the present case, but the judgments of the whole Court were, we think, expressed by Lord Justice Lawrence in the following passage: "The true principle upon which this case ought to be decided is that the right to the access of light which the owner of the dominant tenement acquires under section 3 of the Prescription Act, 1832, is measured by the amount of light actually enjoyed throughout the whole period of prescription, so the freedom from nuisance to which the owner of the dominant tenement becomes absolutely and indefensibly entitled under the section at the end of the period of prescription must be measured by, and be the same as, the freedom from nuisance which the dominant owner was in fact enjoying at the commencement of that period. It follows in my judgment that the right of the dominant owner cannot be enlarged by any alteration in his tenement during the period of prescription." The Lord Justice then quoted a passage from the judgment of Mr. Justice Wright in Warren *v.* Brown (1900, 2 Q.B. 722), "When the full statutory time is accomplished the measure of the right is exactly that (neither more nor less) which has been uniformly enjoyed previously."

On this part of the case it is necessary to add that the Court found that the light from the skylights was not light of which the plaintiff could be deprived at any time and such deprivation as had occurred was solely due to her own act. It only remains to notice the point made for the plaintiff that the vertical light from the skylights was not so satisfactory as a horizontal light and it might affect the annual value of the premises. As the Court found that no nuisance had been proved it is difficult to see how any damages could be claimed, and the Master of the Rolls appears to have accepted that view, seeing that if the skylights were reinserted the evidence was that the room would be sufficiently lighted for the ordinary uses of mankind. Lord Justice Lawrence pointed out that the east window itself was close to the ceiling of the room and thus approximated to a skylight. Lord Justice Romer observed that since the decision in Coll's case he doubted whether in any case where an obstruction to light had been held not to be actionable there had not been some diminution of rental value in the dominant tenement, because people were willing to pay higher rents for the luxury of exceptional light in excess of the minimum required for comfortable enjoyment, but in considering the question of obstruction of ancient lights the Courts had nothing to do with the rental value of houses.

We may perhaps add that, in the Court below, the judge, on the point whether the light from the skylights could be treated as unsatisfactory, had held that without detracting from anything he had said in Price *v.* Hilditch (1930, 1 Ch. 500; *The Builder*, March 21, 1930), the manner in which the room had been used and lighted in the past could not be disregarded, and the room during the greater part of the 20-year period had been lighted by the skylights and had practically always been used by builders, sometimes for storing materials, and it had machinery in it such as circular saws, but it had never been used for clerical work, although it might be that in the future the plaintiff might desire to use it as an office. But in that last event the learned judge did not consider the whole of it need be so used. As will have been seen, the Court of Appeal accepted these findings.

Encampments of Caravans.

In our issue for August 26, 1932, we drew attention to a case Attorney-General *v.* Corke (1933, 1 Ch. 89), where, in connection with an encampment of caravans, a nuisance was created by persons occupying the caravans in the neighbourhood, and an injunction was granted against the person who, by putting his land to an abnormal use, had created the nuisance. Another case is now reported (*The Times*, June 14; *The Builder*, this issue, page 1054) dealing with this question, Mitcham Urban District Council *v.* Seale. The case is at present reported very briefly, but it appears that certain structures, such as caravans, converted tramcars and converted omnibuses, had been collected together and used as dwellings on land in the district, and the Council were applying under Section 27 of the Public Health Acts (Amendment) Act, 1907, for a declaration that they were entitled to pull them down or remove them.

It appears to have been contended that the structures in question were not temporary buildings within the contemplation of the section, but the Court held that while in other surroundings the structures in question might be suitable residences, here they were all cooped up together in a narrow yard which was unpaved, undrained and muddy in wet weather, and where various businesses were carried on, and with only one water tap for the use of persons living in the structures, and that it was a case where the Court should exercise its discretion and grant a declaration if the Council could show that they were entitled to it as a matter of law.

The main objection taken to the application in law appears to have been that the order could only be made against the person who himself was the owner or had set up the structure without permission, and that the defendant was not such a person. The exact

position of the defendant is not stated in the present report, but from passages in the judgment we gather that the defendant had "throughout assumed dominion of the yard and all that was in it, and her attitude had been that she was the person who was protesting against the removal of the structures," and in these circumstances the Court was not prepared to hold in law that she was not the owner. The Court, however, appears to have held that although proceedings can only be taken against the person erecting the structure, or against the owner where the application is for penalties, or for the recovery of the expenses of pulling down or removing the structure, under the section the local authority has power, without taking any proceedings, to pull it down or remove it, and as regards the present application the local authority might well prefer to secure themselves by applying to the Court for an order justifying the proceedings, and therefore judgment was given for the declaration sought.

We draw attention to this decision as it is of great importance to local authorities, but the brief report at present available does not enable the case to be discussed with any certainty. The material subsection of Section 27 is subsection (4) and we may note that where a building is pulled down or removed by the local authority it lies in their discretion whether they shall proceed against the owner, or the person setting it up, for the expenses they have incurred. Thus proceedings against the owner are so far unnecessary, but, under subsection (5), where any such building has been pulled down or removed, the local authority may sell the materials or any part of them, and apply the proceeds of the sale towards the costs and expenses incurred by them and then pay the balance to the owner, so here the owner comes in, and we note the Court intimated that it was desirable that the owner, if known, should be made a defendant.

LAW REPORTS

CHANCERY DIVISION.
MR. JUSTICE LUXMOORE.

DISPUTE AS TO "VESTING" OF SEWERS.

South Strand Estate Development Co., Ltd. *v.* The East Preston Rural District Council.

This action, which raised an important question relating to the vesting of sewers under Section 13 of the Public Health Act, 1875, was brought by the South Strand Estate Development Co., Ltd., for a declaration that the sewers or sewerage works constructed by the plaintiffs at Angmering-on-Sea, Sussex, were vested in the plaintiff company and not in the defendants, the East Preston R.D.C. (now the Worthing R.D.C.), and for an injunction restraining the Council from taking over the sewers without payment for the purpose of their Angmering, East Preston and Rustington sewage disposal scheme.

The question as to in whom the sewers and works were vested rested upon whether the plaintiff company was a separate entity carrying on business for the profit of its shareholders, or whether, as the defendant Council asserted, it was merely a Mr. William Hollis under another name, and that the sewers were laid as a necessary adjunct to the development of his building estate.

The statute on which the question to be decided turned was the Public Health Act, 1875, Section 13 of which provides as follows:—"All existing and future sewers in the district of a local authority together with all building works, materials and things belonging thereto except: (1) sewers made by any person for his own profit or by any company for the profit of the shareholders; (2) sewers made and used for the purpose of draining, preserving or improving land under any local or private Act of Parliament or for the purpose of irrigating land; and (3) sewers under the authority of any Commissioner of Sewers appointed by the Crown shall vest in and be under the control of such local authority."

Section 14 authorises any local authority to purchase or otherwise acquire from any person any sewer or any right of making or of user or other right in or respecting a sewer.

In giving judgment, his lordship, after stating the nature of the action and the relief which the plaintiff company sought, said that the question he had to decide depended upon the proper construction of Section 13 of the Public Health Act, 1875, and whether the plaintiffs had brought themselves within one or other of the exceptions to the section.

Mr. Swords, on behalf of the plaintiffs, admitted that, in order to succeed, he must show that the case fell within the exceptions.

Referring to the facts, his lordship said that in the year 1912, Mr. Hollis acquired the estate in question. There was then no common drainage system there or proper water-supply system. Mr. Hollis wanted a proper system of drainage and a proper water supply instead of cesspools for drainage and wells for the supply of water. He decided, on the advice of his solicitor, to form a company for that purpose, and accordingly the plaintiff company was formed in January, 1914. On the evidence, he had no hesitation in holding that the filter bed and tank were not completed and were not connected with the pipe-line until after the formation of the plaintiff company in January, 1914, and that the pipe-line was not used for the disposal of the sewerage until after the formation of the company.

Proceeding, his lordship said there was a lease by the owner of the building estate to the company of the rights and privileges of making sewers on the land for the purpose of providing a drainage system. It was for the term of 99 years, the consideration paid by the company being £2,543 and an annual rent. The cost of constructing the sewer was debited to the company, and anyone wishing to use the sewer had to enter into an agreement with the company. The drainage rates had been collected by and credited to the company throughout. The question was, was the drainage scheme made for profit? Having regard to the evidence and the authorities he thought that the only possible answer to that question was in the affirmative. He had no hesitation in holding that the sewers and sewerage works were constructed on behalf of the plaintiff company for profit, and that in the circumstances they were vested in the company for the term of the lease and not in the defendant Council, and he granted the plaintiffs the declaration they asked for.

Mr. Swords (for the plaintiffs) said it was not necessary in the circumstances for his lordship to grant the plaintiffs the injunction asked for as the declaration would be sufficient.

A question arising as to whether the sewers were vested in Mr. Hollis, subject to the lease to the company, or in mortgagees, his lordship said he would simply make a negative declaration that the sewers and works were not vested in the defendant Council.

The plaintiffs were given the general costs.

KING'S BENCH DIVISION.
Before MR. JUSTICE HUMPHREYS.

STRUCTURES AS TEMPORARY BUILDINGS. RIGHT OF LOCAL AUTHORITY TO REMOVE.

Mitcham Urban District Council *v.* Seale.

In this case the Mitcham U.D.C. claimed against the defendant, Mrs. Mary Seale, of Lewis-road, Mitcham, declarations that certain structures, viz., caravans and converted tramcars and omnibuses used as dwellings in Lewis-road were temporary buildings within the meaning of section 27 of the Public Health Acts Amendment Act, 1907, and that the Council were entitled to pull them down or to remove them.

The defence was a denial that the structures in question were temporary buildings.

Mr. S. G. Turner, K.C., and Mr. J. Hodson appeared for the plaintiffs; and Mr. C. Bray for the defendant.

At the conclusion of the arguments his lordship, in giving judgment, said that it was impossible for any Court to entertain any doubt that the structures in question were clearly temporary buildings within the meaning of section 27 of the Act of 1907. Mr. Bray had argued for the defendant that that class of buildings could never have been within the contemplation of those who drafted the Statute, and that they were quite different from ordinary temporary buildings. It was true that they were dwelling-houses where people had lived for some time and contained all the ordinary conveniences of life except sanitary conveniences, but that appeared to be a very excellent reason why a local authority should take an interest in the matter, because with the advance of science and sanitation, methods of dwelling which were regarded as quite satisfactory in the time of our ancestors were no longer to be regarded as satisfactory at all. In other surroundings the structures in question might be perfectly suitable residences, but they were at present all cooped up together in a narrow yard which was unpaved, undrained, and muddy in wet weather, and in which various businesses were carried on. There was only one tap for the use of the whole of the people living in those structures. In the circumstances the Council had satisfied him that this was a case where he ought to exercise his discretion, and where it was eminently desirable in the public interest that such a state of things should cease. In the present case the Council were wise in taking action against Mrs. Seale, as she had throughout assumed dominion of the yard and all that was in it. He was not prepared to hold in law that she was not the owner, though no doubt it was desirable that the owner, if known, should be made a defendant. There would therefore be judgment for the plaintiffs for the declaration they asked for.

OFFICIAL REFEREE'S COURT (SIR FRANCIS NEWBOLT, K.C.).

ACTION BY BUILDERS AND CONTRACTORS AGAINST OIL COMPANY.

Albert Henry Earnshaw (trading as A. H. Earnshaw and Son) *v.* Russian Oil Products, Ltd.

The plaintiffs, Messrs. A. H. Earnshaw and Son, builders and contractors, of Grange-road, Darlington, brought this action against Russian Oil Products, Ltd., of 153, Moorgate, London, E.C., to recover £1,588 3s. 2d., the balance of the charges they alleged to be due to them for constructing a petrol depôt for the defendants at Thornaby-on-Tees. According to the plaintiffs, the price of the work contracted for in 1931 was £2,898, of which the plaintiffs received from the defendants certain sums on account.

The defendants admitted the claim, but counterclaimed for £2,073 as the loss which they alleged they had sustained by reason of the fact that the contract should have been completed by November 12, 1931, and it was not until February 3, 1932, that the work was finished. The defendants' case was that petrol could be delivered by sea at Thornaby, and the idea of having a depôt there was to save the cost of transporting petrol by rail to an old depôt at Blagdon, near Newcastle. Defendants also claimed £104 in respect of alleged bad work.

The plaintiffs, in reply, blamed the defendants for the delay in completing the work, and they also denied that there was any bad work.

Sir Francis Newbolt, after hearing evidence which lasted several days, in the course of a considered judgment said that the plans did not show that the site was not level, and that caused delay for which the plaintiffs were not responsible, and therefore the twelve weeks' time limit of the contract must be disregarded. There was, however, some delay for which the plaintiffs were responsible, and the plaintiffs had suffered some damage which he assessed at £200. The plaintiffs' claim being admitted, there would be judgment for them for £1,545, and for the defendants on the counterclaim for £200.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Scottish Housing.

The Parliamentary Secretary for Scotland, in presenting the Scottish Estimates, said that the number of houses completed in Scotland in 1932 was 15,818. Up to December 31, 1932, the number under construction, or for which definite contracts had been made, was 30,777, the highest figure reached in Scotland since the Housing Act became law, and almost 4,000 higher than record. The figure of slum clearance houses completed by the end of 1932 was 19,699. In the following five months tenders had been approved for a larger number of slum clearance houses than had ever been approved in the corresponding period of any year. For that period of 1931 the tenders rose just above the 2,000 limit; in 1932 they rose to 2,969; and for the first five months of this year the figure was 3,739. That showed that the local authorities were steadily increasing the number of slum clearance houses. But the task of slum clearance was not completed, and the Department would spare no efforts in this direction. With regard to the £3 subsidy houses, the Act had been in operation for just over a month, and there were already finally approved 104 £3 subsidy houses. Applications were in for 668, and inquiries were coming in on a larger scale. The cost of houses was being constantly reduced. For all types of houses in 1932, the average builder's cost was £300, and that had fallen in the first five months of this year to £285. With regard to the building society guarantee, 14 building corporations had been formed, involving the construction of approximately 4,000 houses. He was unable to say what proportion of those houses would be for letting purposes, but the formation of those 14 corporations showed the extent to which private enterprise had roused itself. With regard to town planning, it was of importance that the city of Glasgow and its environs were now completely town planned, and that the city of Aberdeen and the surrounding country to the extent of 96 square miles had got a most admirable town-planning scheme. In the case of Aberdeen, one of the results of the original scheme had been that the banks of the Dee for eight miles inland from Aberdeen were preserved for all time as a beauty spot.

Houses Built.

MR. MITCHESON asked the Minister of Health if he could state the total number of houses built in the six months ended March 31, 1933, and, for comparison, the corresponding total for the six months ended March 31, 1932.

SIR HILTON YOUNG said that the total number of houses of a rateable value not exceeding £78 (or £105 in the Metropolitan area) completed in England and Wales during the six months ended March 31, 1933, was 104,981. The corresponding total for the six months ended March 31, 1932, was 106,461.

The Rent Bill.

In the House of Lords, in Committee on the Rent and Mortgage Interest Restrictions (Amendment) Bill, LORD DYNEVOR moved a new clause to exempt certain agricultural estate cottages from the provision of the Acts amended and continued by the Bill. He said that the object of his clause was to give the agricultural estate owner and landlord the right to get possession of a house of the rateable value of £13 or under without first going to Court. The principle of such discrimination in favour of the agricultural landlord was established by the Finance Act of 1911.

LORD GAGE, replying for the Government, said that the clause would be a little severe on the tenant. It was conceivable that an unscrupulous landlord might play on the ignorance of his tenant. Moreover, if the clause were adopted, agricultural landlords would be treated quite differently in respect to legal procedure from other landlords, who were obliged to prove their claim to possession of protected houses. He could not see why agricultural landlords should not do the same. He admitted that there were special grounds which might justify an agricultural landlord acquiring possession of cottages, but those were met in the Bill. On the whole, the system of the agricultural certificate was working fairly well. It was the desire of Lord Dynevor that once a landlord had obtained possession of a cottage, all control of tenure and rent and everything else should disappear entirely. That proposal ran counter to the whole principle of the Bill. It was the desire of the Government to increase the pool of small houses and to retain as many cheap houses as they could. Under the new clause, once the landlord got possession of a cottage it could be let at a much higher rent to a week-end tenant.

The new clause was carried by 49 votes to 22.

LORD JESSEL moved an amendment to leave out words giving the council of every borough and every county district "power to publish information, for the assistance of landlords and tenants, as to their rights and duties under the Acts, and as to the procedure for enforcing such rights or securing performance of such duties." He said that the publication of such information would entail additional and unnecessary expense, but that his real objection was that they were throwing on the local authorities what was really the business of the professional classes.

THE LORD CHANCELLOR said that all this provision in the Bill involved was that local authorities could publish information about the Rent Restriction Acts. Many of the difficulties attaching to the working of the present Acts were due to the inability of the people to understand the provisions of the law, which were of a very technical character. One effect of giving this information would be to do away with a great amount of legal proceedings. The local authorities were only to publish information of a general character, and were not to give advice in regard to individual cases. The cost of publishing this information would be trifling.

LORD JESSEL suggested that the Ministry of Health should send a circular to the local authorities instructing them as to the kind of information which they should publish.

THE LORD CHANCELLOR gave an assurance that this should be done.

The amendment was withdrawn.

The Unemployed.

MR. MCGOVERN asked the Minister of Labour if he could state the total number of unemployed persons in the building trade up to date and the total unemployment benefit being paid.

SIR H. BETTERTON said that the number of insured persons in the building industry classification recorded as unemployed in Great Britain at May 22, 1933, was 168,896. Accounts were not kept of insurance benefit or transitional payments paid in separate trades, but, assuming that the average rates for men and boys applied to this trade, the approximate cost of insurance benefit and transitional payments for the above number would be £135,000 a week.

[From a tabular statement subsequently issued, the figures of building-trade workers unemployed at April 24 and March 20 of this year are given as 190,939 persons and 225,410 persons.]

The Palace of Westminster.

LIEUTENANT-COLONEL APPLIN asked the First Commissioner of Works, with regard to the proposal to raise the parapet of the Terrace of the Palace of Westminster by a foot, whether he would assure the House that the Terrace would also be raised by the same amount.

MR. ORMSBY-GORE said that it was not proposed to raise the general level of the floor of the Terrace, but to construct a wall walk approximately 7 in. higher than the Terrace level adjacent to the parapet, in accordance with the designs exhibited in the Tea Room in 1931.

INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

We do not undertake to reply to inquiries concerning proprietary materials.—ED.

QUESTIONS.

Party Wall.

SIR,—Can you inform me whether there is any legislation covering the regulation of party walls in the country? The points I wish for information upon are whether a party which has risen a party wall above its original height (1) can be forced to give user to the other party of that wall, as risen; (2) can claim a proportion of the cost of so raising it from the party who now desires user of the risen portion.

COUNTRY.

Rendering on Chalk.

SIR,—Can you help us in the following matter:—A 1 to 3 cement and sand floated floor, laid upon 6 in. of cement concrete, was laid in the ordinary way upon a subsoil of virtually solid rock chalk. After a short time the cement rendering cracked in every direction, and portions lost key. This was repaired, and then, after another few months, the whole of the rendering lost key. The plasterer who carried out the original floor, and the repairs, and who is an experienced man and one whose opinion we have confidence in, states very definitely that he has had several similar experiences in rendering on concrete laid upon chalk, and attributes it to some chemical action or heating caused by the chalk under certain conditions. We are about to re-execute the rendering, but before doing so should like to know if you have any evidence to show whether it is worth considering the plasterer's opinion.

G. H. AND SON.

ANSWERS.

A Damp West Wall.

[ANSWERS TO "J. S.," BRISTOL, JUNE 23.]

SIR,—The trouble undoubtedly arises from the porous condition of the cement and sand rendering. The exterior surface should be treated with a waterproofing material which at the same time allows the wall to dry out through it. There is a special material of this nature, particulars of which I should be pleased to give your correspondent.

C. D. D.

SIR,—The job really needs seeing before one could give an unqualified opinion, but it appears to be a matter of intense condensation. The outer surface is apparently sealed, and the wall can no longer dry outwards. It is possible that a renewal of the plastering with a coarse floated surface, or even the application of a coarse matt paper, might alleviate the trouble if the cause is as suggested. But there may be more inherent defects than indicated. ABSORBENT.

Cold Bitumen.

[ANSWER TO "H. C. A.," JUNE 16.]

SIR,—Possibly the bitumen has been insufficiently stirred. During storage, some constituents settle to the bottom, and vigorous stirring and scraping round the sides and bottom are necessary to get a uniform mixture. A great deal depends on the nature of the gravel used, some gravel being totally unsuitable for this work. The gravel used must be clean and free from dust; it may be moist when mixed, but must not be wet. The unsuccessful results are probably due to an unsuitable gravel. W. E. WARNER.

Distempers.

[ANSWER TO "READER," JUNE 9.]

SIR,—A modern distemper is an oil-bound water paint, which is to say that it is so constituted as to be conveyed by water although bound by oil. The presence of much lime in the conveying water would tend to produce with the oil a substance of a soapy nature, which is quite consistent with the nature of an emulsion, and should not in any way adversely affect the material. COAT.

THE BUILDING TRADE

MINOR PROBLEMS OF CONSTRUCTION AND REPAIR—XXVI

By A BUILDING SURVEYOR.

ROOF REPAIRS.

The successful repair of a roof calls for knowledge and experience, for if nothing but the refixing of a slipped slate is needed a good deal of damage may be done if the work is entrusted to men who are not competent. A really skilled slater will move about a roof with astonishing freedom without doing any injury, whereas the inexperienced will put one slate right, but leave behind him several others that he has cracked, and will frequently do other damage. If the roof be torched, it is improbable that he will go inside to make good, and very often he will loosen a considerable area. He may stop up the vertical joints between the tails with cement, mortar or mastic, thus forming retaining pockets for water driven in under the tails. Called in repeatedly to the same roof, he will do so much damage that nothing short of stripping and reslating will serve to restore it to good condition.

Some roof leakages are difficult to trace without a careful examination from the inside, for the cause of the trouble may be hidden. A stain on a plastered ceiling does not necessarily serve to indicate the point at which water is finding an entry, for often the water will travel down the rafters and sometimes for a considerable distance along purlins before it will drop off. If the roof be situated in a town and neither torched, boarded nor felted, it is often found that soot and dirt has accumulated to a considerable depth on the ceiling. This, besides being unhealthy, makes a visit to the roof space for the purpose of inspection a very unpleasant job.

Some classes of slate split very readily down the centre, and the presence of the crack is not always easily discerned from a short distance. If the cracked slate be immediately over a rafter the water may reach the wall plate before it is checked. When the crack is about central, and the halves of the slates are firmly held by the nails, a reasonably good repair may be made without removing the slate for replacement. Three pieces of stout sheet zinc may be cut to the same width as the slate and of a length that will reach up to the nailing; one is pushed up under the slate, one over it in the next course, and the third in the next course above. Fitted in this way, the lap is preserved.

Very often lead valley gutters give trouble by reason of the absence of a small tilt fillet, over which the edge of the lead should be dressed to form a check against water being driven in by the wind. In very sheltered positions it may be that water will only be driven in during a gale, but where there is less shelter the penetration is more frequent. The amount of water entering may be small, and sometimes it is driven over the edges of the lead, but not over the edges of the boards on which the lead is laid. When this happens, it gets under the lead and sets up decay. Small quantities of water finding a capillary path are quite often the cause of extensive decay; for, by reason of being small, they serve to keep timber damp, without coming through the ceilings, and may thus remain unsuspected over a term of years.

The louvres of ventilating lantern lights or roof ventilators are sometimes not fixed at a pitch sufficiently steep to exclude driven rain, nor are they always of sufficient width. Made of timber, they are difficult to reach with a brush for repainting. For these reasons some architects use thin-sawn slate slabs for the louvres. The ends should be cut to a slight rake, so that the louvre shall not slip out if the posts shrink. The sills, posts, and the remainder of the framing should preferably be of teak.

The fact that plain tiles vary in size is not apparently as well understood as it should be, or, at all events, it is not always reflected in specifications. Tiling is usually specified to be laid to a gauge, whereas slating is almost invariably specified to be laid to a lap. Plain tiles from different manufacturers may be 10, 10½, or 11 in. long, and if they are laid to a 4 in. gauge, the respective laps will be 2, 2½, and 3 in. With rafters pitched at 45 degrees, a 2½ in. lap is generally thought to be sufficient. In some districts it is considered necessary to lay ordinary Welsh slates with a minimum lap of 3½ in. if the rafters are pitched at 30-35 degrees. All plain tiles are cambered, some of them to a much greater extent than others. This is a matter of importance, for the camber reduces the pitch—that is to say, the effective pitch. The student might with advantage set up full-size details, showing a section through several courses of tiles laid on a rafter pitched at 45 degrees (often described as a square pitch by reason of the meeting at the ridge forming a right angle). Trying tiles of differing makes, he will find that with some of the heavily cambered hand-made tiles the effective pitch may be no more than 30 degrees. Obviously, if the weather conditions met with are such as to require slating to be laid with 3½ in. of lap, 2½ in. for tiles such as these is insufficient.

In former times machine-made tiles were not always to be relied upon. They were apt to break across or shale. So much was this the case that at least one large manufacturer decided to scrap his machinery and return to making his tiles by hand. Very great improvements have, however, since been made, and trouble with machine-made tiles on the score of quality and durability is quite unlikely to be met with, providing that only the best quality are used. Some manufacturers are prepared to give a guarantee against shaling, providing the tiles are of their best quality, and against breakage across if the tiles are put on by their own fixers or to approval. At one time machine tiles could be obtained that were quite flat, but the writer has not seen any of these used for many years. The modern tile usually has a camber that is not quite equal to its thickness. This permits them to lie closely, but not so closely as to be likely to set up capillary action. It is better to avoid bedding tiles solidly on division or party walls, for almost invariably the purlins and rafters shrink after the building dries out. When this happens the bulk of the tiling settles down with the timbers, while that part over the wall remains at its original level. This, besides being objectionable to the discerning eye, is a source of weakness when wind-driven rain sweeps along the roof.

Many architects like a pronounced curvature (bell-mouth) at the eaves, and when it is well done it certainly adds much to the appearance of some roofs. Having regard to the reduction in effective pitch, it is, however, essential that due precautions should be adopted. If boarding and felting cannot be afforded for the whole of the roof, it should at least be used for the bell-mouth. Well overhung eaves afford excellent protection for the walls below, but if the soffit be boarded or plastered so as to ceil them, and the pitch of the tiles be flat, the closed-in space is likely to be damp, and the timber then rots at a comparatively early stage. To nearly all eaves there is some tilt, and when slaters or tilers are sent out on repair work they should always take with them a bag and some shavings, to distribute the weight of the roof ladder and relieve the pressure on the eaves course. When slates or tiles finish against a gable or party wall that is carried up above the roof covering, it often happens that damp makes its appearance in the corner of a bedroom, and the flashing is suspect. More frequently the trouble arises by reason of the omission to provide a damp-course. Even when a hard stone coping is used, a damp-course should be put in. Sometimes the damp will not penetrate to ceiling level, but there is great probability of its reaching the wall plate and purlin ends. It is becoming better recognised that chimneys should have damp-courses inserted a little above the roof covering abutting against them, and similar considerations apply to all other brick or stone abutments. Probably to build in waterproofed cement mortar would put an end to most of such troubles, and when at last we find some way of definitely overcoming salt trouble this is probably what will generally be done.

When roofs are to be covered with single-lap tiles it is important that the timbers should be so carefully put on as to insure true planes. If the tiles ride, there is a considerable likelihood of rain penetrating and, in high winds, of portions being stripped off. On this class of roof more than average skill is required in order to make a good job of the flashings. Having regard to the difficulty of cutting, and the still greater difficulty of making a permanently water-tight valley without it be of copper or lead, it is much better to employ specialists to fix these tiles, unless the roof be quite simple and straightforward.

Flat Roofs.

The weakest point of flat roofs covered with asphalte laid between parapet walls, or abutting against a higher wall, is generally found to be at the skirtings. If damp gets behind the skirtings they may be pushed off as the result of frost, or by reason of exposure to a hot sun. When the surrounding work cannot be delayed to permit of the asphalte being turned up as a skirting, and then carried through the wall, other special precautions should be adopted. A stout slate damp-course a little wider than the wall, and projecting inside so as just to master the asphalte, has been tried and found to answer; but probably as good a method as can be found is to put in four-pound sheet lead protected with felt, and of sufficient width to be afterwards dressed down as a cover flashing. In passing, it may be mentioned that on more than one occasion the writer has found cover flashings lying loose on flats and in parapet wall gutters for want of a sufficiently deep turn-in and proper wedging. Sometimes the "handy-man" re-secures loose cover flashings with iron holdfasts with deplorable results. He is also apt to endeavour to cure leaks in leadwork with putty and paint or other stopping that are bound to be ineffective by reason of the movements set up by expansion and contraction.

NON-FERROUS METALS

The report of the British Non-Ferrous Metals Research Association presented at the annual meeting held on Monday, June 19, at Birmingham, shows that, in spite of the difficulty of the times, the interest of the non-ferrous metals industries in research has been well maintained. Much work has been done on an investigation dealing with the factors involved in the frost bursting of water pipes, concerning which it is somewhat surprising to learn that remarkably little is at present known. The mechanism of ice formation under various conditions and the behaviour in freezing of pipes of different materials are being studied in detail. The new lead alloys containing small quantities of cadmium and tin or antimony which were developed by the Association for cable sheathing are now finding increasing application in other fields, such as water pipes, for which purpose they offer considerable advantages over ordinary lead. Tests are also being conducted with new materials for water pipes in which lead is alloyed with .05 to .06 per cent. of tellurium. The effect of various soils on pipes of these new alloys and on copper pipes is also being investigated with a view to discovering the most suitable material for use in particularly corrosive soils. Another research deals with the corrosion of galvanised hot-water tanks, with the object of developing methods whereby corrosion can be prevented. The report contains an appreciation of the work of Dr. R. S. Hutton.

SOUTHERN COUNTIES FEDERATION

HALF-YEARLY MEETING, PORTSMOUTH.

THE summer meeting of the Southern Counties' Federation of Building Trades Employers, which covers the counties of Hampshire, Bucks, Berks, Oxon, Surrey, Sussex, Kent, and the Isle of Wight, commenced at Portsmouth on June 21, when the combined half-yearly meeting of members of the Federation and the members of Executive Council was held in the Council Chamber at the Guildhall under the Presidency of Mr. G. B. Sprigings, Portsmouth. Before the commencement of business, the members were welcomed by the Lord Mayor.

In the course of his address to the Conference, the President said the Augmented Officers' Sub-Committee had been having a busy time, arising out of the need which they felt to exist to review the question of gradings. Bound up intimately with the question of future gradings was the difficulty presented by the serious difference between the grade rates of wages of places in the Outer London region and the grade rates of places between 15 and 20 miles from London. Whilst, unfortunately, it was undeniable that the question had already engaged attention over a long period, its importance was such that the officers felt that nothing mattered except to arrive at a solution which would work. Generally, there seemed evidence that 1933, despite the prices at which work had been undertaken, had been more active and encouraging than the corresponding period of last year.

There was evidence of the vigorous effort made by local associations in support of the "Build for employment" campaigns, and a valuable contribution to renewed building activity had been made by the Building Industries' National Council, in which the Federation played an important part. He was glad to be able to say that, before very long, there would be established a Joint Panel of Architects and Builders for Surrey, Sussex and Kent. Efforts in the direction of organisation had, considering the strenuous times, been encouraging, 20 new members having joined since the beginning of the year, mainly in Portsmouth and the Isle of Wight. Despite some setback, the 1931 form of contract was working its way into ever greater use.

A lively discussion followed the President's résumé, and the President of the National Association, Mr. G. S. Harding, of Nantwich, addressed the members on the work of the special committee of the National Federation which had been dealing with the various phases of the problem of unemployment as it affected the building industry. This, too, aroused a keen discussion.

Mr. R. F. Seward (Bournemouth) presented a comprehensive report on the question of the securing of tangible benefits for Federated builders, and dealt with a number of questions which were raised in the ensuing discussion.

At a luncheon at the Savoy Café, at which over 200 persons were present (Mr. G. J. Davis in the chair), Mr. G. S. Harding, A.I.O.B. (President of the National Federation of Building Trades Employers), toasting the Southern Counties' Federation, remarked that twenty or thirty years ago two builders walking down the same street would carefully avoid each other. In fact, the law of the jungle prevailed, the stronger feeding on the weaker. But the advent of the Federation had made a vast difference, and now builders were more mindful of the interests of the whole, and doing their best to help each other. The law of the jungle, in fact, was giving way to ideas of mutual co-operation. He likened the Southern Counties' Federation to the strong right arm of the national body, and went on to recall that there was a time when the relations between employers and workers were determined individually. But things had now vastly changed. As in all the big industries it had been found impossible to carry on in theirs on the basis of individual contracts. He believed that economic legislation in the future would be influenced more strongly by the point of view of such organisations as theirs than by votes at the pooling booth. The Federation to which they belonged was the most powerful in the country, and, he believed, in the world.

Mr. C. B. Sprigings, F.I.O.B. (President, the Southern Counties' Federation of Building Trades Employers), replying, expressed his pleasure as a local man at the honour done to Portsmouth and himself. It was 12 years since they last had a visit from the Federation, and he hoped that in the future there would not be such a lengthy interval. He appealed to the local builders to rally round the Federation. There were many obtaining the benefits of its work who were not yet members. Major A. D. S. Rice, F.I.O.B. (President, London Master Builders' Association), made an appeal for a limitation of the ruinous competition that still prevailed. It was, he said, ridiculous and suicidal.

A Presentation.

A reception and dance for the Federation was held in the evening at the Savoy Café by the President of the local association (Mr. G. J. Davis) and Mrs. Davis, who entertained 300 guests at a most enjoyable social function. During an interval in the dance programme a pleasing ceremony was performed by Mr. C. B. Sprigings (President of the Federation), who presented his predecessor, Mr. W. J. Brooker, of Eastbourne, with a silver salver, inscribed with words expressing the warm appreciation of the Federation officers and delegates for Mr. Brooker's faithful services as President during 1932.

Among the members and guests present were the Lord Mayor and Lady Mayoress (Alderman and Mrs. W. A. Billing), Mr. H. Hinkins (Vice-president of the Federation), Mr. G. S. Harding (President, National Federation), Councillor R. J. Winnicott (Vice-president of the Association), Alderman A. E. Porter, J.P., Councillor Dr. A. Bosworth Wright, J.P., Councillor L. Lloyd Evans, Councillor E. Fookes, Major R. Bullin, T.D., J.P., Major A. D. S. Rice (President, London M.B.A.), Mr. P. Childs, J.P., Lieut.-Col. E. J. W. Porter, R.E. (T.), and Mr. J. Moffitt, and Mr. A. Cannon (Secretary).

GIRDER BRIDGES

A revised edition of Parts 1 and 2, Materials and Workmanship respectively, of the British Standard Specification for Girder Bridges (B.S.S. No. 153) has been issued in one volume by the British Standards Institution. This is the first revision of these parts of the specification, which were originally published in 1922. The Committees entrusted with the preparation of the revision included representatives of the Government Services, the Dominions and Colonies, public utility companies (as the railways), professional bodies and manufacturing concerns—a comprehensive committee. In Part 1, Materials, wrought iron is now required to be exclusively of the Grade B quality of the B.S. Specification for Wrought Iron for Railway Rolling Stock (B.S.S. No. 51) and the former requirements for cast iron used for parts liable to straining action have been superseded by reference to the B.S. Specification for General Grey Iron Castings (B.S.S. No. 321). The reproduction in an appendix of the B.S. Specifications to which reference is made has been discontinued. Part 2, Workmanship, has been extensively modified to keep pace with progress in constructional methods and advantage has been taken of the experience gained in using the original specification to amplify the clauses where it has been shown that more detailed information was desirable. New clauses have been introduced to cover the use of universal plates, flame cutting (as an alternative to shearing) and parallel barrel drifts for erection purposes. As in the previous issue alternative courses or methods are provided.

Copies of the revised issue (No. 153, Parts 1 and 2, 1933), may be obtained from the Publications Department of the Institution, 28, Victoria-street, S.W.1, price 2s. 2d.

NEW CINEMAS

Banbury.—Preliminary plans have been prepared for a proposed cinema on a site in Cornhill, to seat about 1,000 persons. No contracts yet placed. The architect is Mr. Albert H. Jones, F.R.I.B.A., Victoria Station House, S.W.1.

Barry.—Work on the alterations and additions at the Royal Cinema will be carried out by Messrs. Vickery Bros., Barry, Glam. Plans are by Mr. J. Alfred Owen, Barclays Bank-buildings, Holton-road, Barry.

Didcot.—The contract for the new cinema has been placed with Messrs. Boshers (Cholsey), Ltd., Cholsey, Berks. Plans are by Mr. A. B. West, F.R.I.B.A., "The Knowle," Abingdon, Berks, for Messrs. W. R. Cullen and Son, the Coronet Cinema, Didcot.

Dunbar.—At the Dean of Guild Court plans were passed for the erection of a vestibule at the Cinema House, Dunbar.

Market Deeping.—Mr. W. V. T. Snow, 74, Eastfield-road, Peterborough, is promoting a scheme for a cinema on a site at Market Deeping, near Peterborough. The scheme at present is in an early stage, and a definite appointment of architect has not yet been made.

Newburn-on-Tyne.—The contract for the erection of a new picture-hall and shops at Lemington will be carried out by Mr. Charlton, builder, Lemington, the proprietor. Mr. E. Lawson, 19, Ridley-place, Newcastle-upon-Tyne, is the architect.

Newcastle-on-Tyne.—Messrs. Stanley Miller, Ltd., 17, North-street, Newcastle-on-Tyne, have secured the contract for alterations to the Empire Theatre in Newgate-street. Messrs. W. and T. R. Milburn, 17, Fawcett-street, Sunderland, are the architects.

Newcastle-on-Tyne.—The contract for the erection of the cinema in the Haymarket, Newcastle, has been let to Messrs. Thomas Clements and Son, Selbourne-gardens, Newcastle-on-Tyne. Work is proceeding on demolition work. Messrs. Dixon and Bell, Pearl-buildings, Northumberland-street, Newcastle-on-Tyne, are the architects.

Plymouth.—Messrs. Pearn Bros., Ltd., of Plymouth, are builders for the Plaza Cinema in Exeter-street. The steelwork is by Messrs. Blight and White, Ltd., Plymouth.

Surbiton.—A new company, Odeon (Surbiton), Ltd., has been formed to acquire a site and erect a new cinema. The registered offices are at 39, Temple-row, Birmingham.

Tewkesbury. — Messrs. Satchwell and Roberts, 6, New-street, Birmingham, have prepared sketch plans for a cinema in Tewkesbury. This is in addition to a scheme for a picture-house, to seat 680, proposed in the High-street to plans by Mr. W. Leah, 10, Clarence-street, Gloucester. Both applications are being considered by the Town Council.

West Kirby.—It is stated that, in addition to the scheme for erecting a cinema on the site of the Queen's picture-house in Grange-road (referred to in June 16 issue), another scheme for the erection of a cinema to seat 1,600 persons is proposed for another site in Grange-road, on the Sandlea Estate. Shops and café are also proposed.

Weybridge.—Plans are laid for a large cinema in Queen's-road and York-road, together with shops and flats. The contract for the latter has been placed with Messrs. T. H. Adamson and Sons, 145, High-street, S.W.15. The architect is Mr. A. P. Starkey, "Dunsmore," South Hill-avenue, Harrow, Middlesex.

Yiewsley.—Extensive additions are to be effected at the Marlborough Cinema, to the plans of Messrs. Imrie and Angell, 2, Mitre-court Chambers, E.C.4. The contractors are Messrs. E. H. Burgess, Ltd., 20, Grosvenor-gardens, S.W.1.

BUILDING SCIENCE

For a number of reasons some of the materials used in primitive construction are now being revived, and this is in many cases associated with scientific study of their properties and the reasons why they have proved suitable. In Russia, considerable attention is being devoted at the present time to developing the use of unfired clay in building construction, principally in connection with the provision of cheap houses. Clay is being used either in the form of air-dried blocks and lumps similar to the adobe of ancient times and primitive countries, or rammed between shuttering in the familiar *Pisé de terre* construction. The April issue of "Building Science Abstracts" contained summaries of a number of papers, read at a recent Russo-German Conference, on the use of clay in this manner, and these are supplemented in the May issue by an account of an investigation of the properties of Ukrainian earths and their suitability for use in rammed clay structures. Results indicate that it is possible to improve the material either by the addition of non-plastic ingredients or by some form of heat treatment.

Bricks and Moisture.

The traditional use of clay in the form of burned bricks and developments both in the form of the material and the method of utilising it are touched upon in several of the papers summarised in the May issue of "Building Science Abstracts." Abstracts Nos. 784-86 describe a number of hollow and perforated light-weight blocks and their use for the purpose of providing protection from damp and cold without the weight of material unavoidable when solid bricks or stone are used. The causes of the penetration of water through brickwork have been studied in the laboratory of an American cement company with special reference to the permeability of various types of mortar; a summary of the report is given in Abstract No. 909. In this investigation numerous small brick reservoirs were constructed with a comparatively hard burnt and a more porous type of brick. After curing for 30 days they were filled with water. In some cases the route followed by the water in its passage through the brickwork was made visible by the use of a stain. The results obtained lead to the conclusion that water does not penetrate through the brick or the mortar, but through openings and cracks between them, and that the same combination of brick and mortar, which in one set of conditions will produce a good bond and a dry wall, may fail to do so when conditions are slightly different. A comparatively recent development in the use of brickwork is the introduction of reinforcement into the joints for the purpose of enhancing the tensile strength and resistance to shear of the masonry. Since its use by Brunel in the construction of the Thames tunnel, its use has developed in America, and particularly in India, and latterly a considerable volume of data resulting from experimental work has been published. This has been reviewed in a paper summarised in Abstract No. 911. As a result of the survey it has been concluded that the assumptions permissible in the design of reinforced concrete are equally applicable to reinforced brickwork; the use of deformed round reinforcement is to be recommended; bond stresses should be limited to 80 lb. per sq. in., and shear to 25 to 30 lb. per sq. in.; to develop maximum strength the reinforcement should be placed in vertical joints. The most recent investigation on reinforced brickwork has just been completed at Lehigh University, and the results obtained are summarised in Abstract No. 912. Bricks used to build the 15 brickwork columns required for this investigation were manufactured by the de-aeration process.

Thatching Materials.

An account of the materials used for thatching is referred to in Abstract No. 915. The article gives information on the pitch, thickness, weight, cost and durability of thatched roofs, and discusses various methods of preventing ignition of the thatch by sparks from the chimney, one of which consists in fitting an expansion chamber in the flue, which permits solid particles to settle instead of being blown out with smoke.

Glass in Structures.

The use of glass in structures for purposes other than windows and the like is referred to in several items of the May issue of "Building Science Abstracts." Although glass possesses many advantages as a facing material, such as resistance to abrasion, chemical attack and weathering, it is difficult and expensive to fix in place (Abstract No. 792). Securing with screws is costly on account of the necessary drilling, and laying in putty is unsafe. The method of laying in a mortar screed usually adopted for ceramic tiles has been found unsuitable for glass, owing to the shrinkage of the mortar; but if a layer of plastic material be inserted between the mortar and the glass, it may be possible to use this method with success. In Abstract No. 790 reference is made to light-weight structural glass produced by the use of a filler, such as pumice, or the introduction of bubbles of gas or air, while Abstract No. 791 mentions structural glass as manufactured from clay, dolomite, slags and waste phosphorite, which have a crystalline structure and are similar to fused basalt. Such materials are stated to be suitable for the manufacture of paving tiles, facing material, etc., and, in conjunction with siliceous fillers or metal reinforcement, for the production of "glass concrete" of different types. The use of special ultra-violet transmissive glass is touched upon in Abstract No. 943, which is concerned with the loss of transparency for ultra-violet radiation suffered by certain types of glasses used for glazing classroom windows in a school in Germany. Of interest in connection with the efforts which are now being made to take advantage of the health-giving properties of short-wave radiation are two abstracts:—No 942, which deals with the development in combining ultra-violet radiation with general overhead lighting, and No. 939, which gives in brief form the main points of criticism levelled against the new draft building regulations of the City of Berlin, which require a definite number of hours of sunshine for the different building zones.

Results of tests carried out at the Forest Products Laboratory of the United States of America indicate that a wood hygrometer can be adapted for the rapid determination of the moisture content of a concrete sub-floor over which a wood floor is to be laid. A brief description of the instrument and of the method of using it are given in Abstract No. 913.

The section of the May issue of "Building Science Abstracts" devoted to concrete and cement refers to a number of interesting and valuable contributions to the literature. Among these may be mentioned the report of a study of the deterioration of cement when exposed to the atmosphere, the results of which are in agreement with those obtained in a similar investigation carried out some time ago at the Building Research Station (Abstract No. 825). A survey of proprietary integral and surface waterproofers on the market is referred to in Abstract No. 817; the original paper includes a list of 85 references to the literature and to the patents covering these substances.

Electrical Engineers' Conversazione.

The annual conversazione of the Institution of Electrical Engineers was held at the Natural History Museum, Cromwell-road, S.W., on Thursday, June 22. Guests were received by Professor E. W. Marchant, D.Sc., President, and Mrs. Marchant, and a pleasant evening was spent with conversation and music.

THE ROYAL HOSPITAL SCHOOL, HOLBROOK, SUFFOLK

A DESCRIPTION of this work is given on page 1035.

The quantity surveyors were Messrs. George Corderoy and Co., the consulting engineers (heating and lighting) Messrs. Henry Lea and Son; (water) Mr. W. Vaux Graham; (acoustics) Mr. Hope Bagenal. The sculptors were Messrs. William Bloye, Allan Howes, Hermon Cawthra, and J. A. Stevenson.

The general contractors were Messrs. J. Gerrard and Sons, Ltd., of Swinton, Manchester, and the following firms were associated with the work: Rubery Owen and Co., Darlaston, steelwork; J. Gerrard and Sons, Ltd., concrete; British Reinforced Concrete Engineering Co., Stafford, reinforcements; Blockley, Ltd., Wellington, Salop, bricks; Craven, Dunnill and Co., Ltd., Jackfield, Salop, wall tiling; Bath and Portland Stone Firms, Ltd., stone; Lyne and Sons, Ltd., Birmingham, terrazzo; Ragusa Asphalte Paving Co., asphalt; Haywards, Ltd., pavement lights; J. Gerrard and Sons, Ltd., wood floors (block and strip); Henry Hope and Sons, Ltd., Smethwick, Birmingham, steel casements; J. Gerrard and Sons, Ltd., joinery; John P. White and Sons, Ltd., flush doors; The Bennet Furnishing Co., school furniture; T. Clarke and Co., Ltd., lighting, electric bells and electric fixtures; Smith and Ansell, Ltd., Revo Electric Co., Ltd., Tipton, Staffs, outside fixtures and standards; The Brightside Foundry and Engineering Co., Birmingham, heating and ventilating; Richard Crittall and Co., Ltd., panel heating to chapel; J. Gerrard and Sons, Ltd., Dent and Hellyer, Ltd., Shanks and Co., Ltd., Manchester, Leeds Fireclay Co., Ltd.; and Adamsez, Ltd., Scotswood-on-Tyne, sanitary ware; The Brightside Foundry and Engineering Co., Ltd., hot water supply; Haywards, Ltd., swimming bath staging, railings, etc.; The Birmingham Guild, Ltd., art metalwork; Adams Bros. (Liverpool), Ltd., dining hall fibrous plaster; Gilbert Seale and Son, fibrous plaster, assembly and entrance halls; John Tanner and Son, Ltd., Liverpool, fibrous plaster, chapel; Herbert Morris, Ltd., Loughborough, lifts; Samuel Smith and Sons, Ltd., Birmingham, Geo. Wright (London), Ltd., Bratt Colbran and Co., and the Griffin Foundry, Ltd., Birmingham, fires and fireplaces; May Acoustics, Ltd., acoustics; Henry Hope and Sons, Ltd., Smethwick, roof glazing; Nettlefold and Sons, Ltd., locks; Henry Hope and Sons, Ltd., Smethwick, ironmongery; Baker Perkins, Ltd., Peterborough, bakery and laundry equipment; Barford and Perkins, Ltd., Rochester, kitchen equipment; Tuke and Bell, Ltd., sewage disposal plant; Doulton and Co., Ltd., drainage materials, pipes, etc.; C. Isler and Co., Ltd., bore wells: United Water Softeners, Ltd., water softening plant; Worthington-Simpson, Ltd., water pumping plant; The Paterson Engineering Co., Ltd., swimming bath purification plant; R. C. Cutting and Co., Ltd., lightning conductors; Charles Winn and Co., Ltd., Birmingham, shower mixing valves and fire escape poles; James Slater and Co. (Engineers), Ltd., infirmary sterilising equipment; Alfred Brown and Co., Birmingham, cloakrails; Walter MacFarlane and Co., Glasgow, cast-iron grilles; Gillett and Johnston, Ltd., tower bells and clocks; The Synchronome Co., Ltd., clock wiring.

Messrs. Ames and Finnis, Ltd., carried out roof tiling, as follows:—To the administration block, dining hall, bakery and stores, class room, swimming bath, gymnasium, assembly hall and chapel. The firm's patent "Roma" Italian pattern tiles were used for the foregoing work.

Messrs. Charles Winn and Co., Ltd., Engineers, Birmingham, supplied heating valves, circulating system control valves, fullway and radiator valves (Winn's patent), etc., hot and cold water mixing valves (Winn's "Economic") for lavatories and showers, shower fittings (Winn's "Economic"), and sliding poles for fire escapes.

NEW BUILDINGS IN LONDON

Addiscombe.—SHOWROOMS.—The Croydon Gas Co. are erecting new showrooms with flats over at Lower Addiscombe-road. The architect is Mr. A. Douglas Robinson, F.R.I.B.A., of Queen Victoria-street, E.C.4, and the contractors are Messrs. Charles R. Price, of 107, Bishopsgate, E.C.2.

Barkingside.—REBUILDING.—Messrs. Baker, Hammond and Laver, New-road Works, Rainham, have secured the contract for the rebuilding of the "Old Maypole" public-house, for Messrs. Ind, Coope and Co., Ltd., brewers, Burton-on-Trent. Mr. J. W. Hammond, F.I.A.A., of 40, High-street, Romford, is the architect. The tender price is £17,865.

Becontree. — CHURCH. — Messrs. William Downs, Ltd., 12, Hampton-street, Walworth, S.E.17, have secured the contract for the erection of St. Alban's Church at Becontree. The contract price is £14,858. The associated architects are Messrs. Milner and Craze, 5, Racquet-court, E.C.4, and Mr. R. B. Urquhart, L.R.I.B.A., 12, Tunbridge-avenue, Southend-on-Sea.

Buckingham Palace-road. — FLATS. — Plans have been prepared for a block of flats, with shops on the ground-floor frontage, in Buckingham Palace-road, S.W.1. The architect is Mr. E. Cecil Davies, F.R.I.B.A., 17, Waterloo-place, S.W.1.

Chelsea.—HOUSES.—Plans have been prepared by Mr. Arthur Blomfield, A.R.I.B.A., New-court, Temple, E.C.4, for a residence in Jubilee-place, S.W.3.

Chingford.—EXTENSIONS.—Are to be made to the Langite Works of the Cork Manufacturing Co., Ltd. The contract has been placed with Messrs. Fairweather and Ranger, 111, Charing Cross-road, W.C.2. The architects are Messrs. James Ransome and Coote, 14, Great James-street, W.C.1.

Coulsdon.—OFFICE.—H.M.O.W. has placed a contract with Messrs. H. H. and F. Roll, Ltd., High-street, Epsom, for the erection of a post office and sorting office.

Cricklewood-broadway. — SHOPS. — Messrs. Marshall and Tweedy, FF.R.I.B.A., of 4, Cavendish-place, Cavendish-square, London, W.1, have been appointed architects for the shops and flats to be erected at Cricklewood-broadway. The contract has been let to Messrs. E. and J. Cotton, Ltd., of 74, High-road, Chiswick, W.4, and the steelwork has been let to Messrs. Redpath Brown and Co., Ltd., of Duncannon-street, W.1, and the sole agents are Messrs. Constable and Maude.

Cricklewood-lane. — SHOPS. — Plans have been prepared for seven shops, with flats above. The architect is Mr. A. G. Moulton, 27, Lynton-crescent, Ilford. No contracts yet.

Croydon.—EXTENSIONS.—The C.B. has recommended Mr. H. A. Mackmin, F.S.I., 30, Bush-lane, Cannon-street, E.C.4, and 100, George-street, Croydon, as quantity surveyor for extensions to the Mayday Hospital.

East Ham.—ALTERATIONS.—Plans are under consideration by the proprietors of the Palace Variety Theatre for alterations. The architects are Messrs. Dixon and Braddock, 115, Gower-street, W.C.1.

East Twickenham.—ESTATE.—Plans for the development of the Richmond Bridge Estate by the erection of 35 houses have been prepared by Mr. R. A. C. Churchward, 12, Victoria-street, S.W.1. The builder is Mr. A. E. Goodhew, 2, The Mall, Ealing, W.5.

Edgware.—ESTATE.—Plans have been prepared for the development, for residential purposes, of the Mill Ridge estate. The architects are Messrs. Welch, Cachemaille-Day and Lander, 7, New-square, W.C.2, and the builders are Messrs. Roger Malcolm, Ltd., builders, Old Rectory-gardens, Edgware.

Edgware.—HOUSES.—Mr. A. J. Butcher, F.R.I.B.A., 2, Express-mansions, Edgware, is the architect, and Messrs. G. Knight and Co., Estate Office, Muswell Hill-place, Muswell Hill, N.10, are the builders for 26 houses in Stoneyfields-lane.

Euston-Road.—TOWN HALL.—The St. Pancras B.C. has recommended Mr. A. J. Thomas, F.R.I.B.A., 28, Upper Park-road, Hampstead, N.W.3, as the architect for the new Town Hall in Euston-road, N.W.1. The site is to cost £53,200.

Fulham.—FLATS.—The trustees of the Peabody Donation Fund, 15, Buckingham-street, W.C.2, are negotiating for sites for blocks of dwellings. The architect to the Trust is Mr. Victor Wilkins, F.R.I.B.A., 12, York-buildings, Adelphi, W.C.2.

Greenwich. — BUILDING. — The Civil Engineer-in-Chief's Department of the Admiralty has accepted an estimate for the superstructure of Transit House from the Cleveland Bridge and Engineering Co., Ltd., Darlington.

Hammersmith.—FLATS.—On the site of the discontinued church of St. Gabriel's, in Clifton-street, W.11, flats are to be erected for the Aubrey Trust. The plans have been prepared by Mr. Victor Wilkins, F.R.I.B.A., 12, York-buildings, Adelphi, W.C.2. The builders are Messrs. John Greenwood and Co., Ltd., 12, Arthur-street, E.C.4.

Hammersmith.—TOWN HALL.—The B.C. has recommended the appointment of Sir Brumwell Thomas, F.R.I.B.A., F.3, Albany, Piccadilly, W.1, as architect in connection with the revised scheme for the new Town Hall.

Hendon.—FLATS.—Plans have been prepared for 64 flats, with garages, etc., in Brent-street, N.W. The architects are Messrs. Percy V. Burnett and Cecil J. Eprile, F.R.I.B.A., 107, Jermyn-street, S.W.1, and the builders are Messrs. Higgs and Hill, Ltd., Crown Works, South Lambeth-road, S.W.8.

Hendon.—FLATS.—Ten shops, with about 20 self-contained flats above, are to be erected in Hendon-way, N.W., for Dr. J. P. Kahanas. The building has been designed by Mr. A. P. Lloyd, A.R.I.B.A., 71, Lincoln's Inn-fields, W.C.2. No contract has been placed yet.

Hendon.—HOUSES.—Plans have been prepared for 18 houses and 17 garages in Steynings-way, 40 houses and garages in Cissbury Rings, and 47 houses and garages in Lullington Garth and Cissbury Rings North. The architect is Mr. O. H. Cockrill, A.R.I.B.A., 35, Weston-chambers, Weston-road, Southend-on-Sea.

Islington.—BUILDING.—The L.C.C. has placed a contract with the Ashford Builders Co., Ltd., 3, Bloomsbury-place, W.C.1, at £6,589, for a new operating theatre, X-ray department, etc., at St. Mary Hospital, Highgate Hill, N.19.

Margaret-street. — SHOPS. — The Margaret Estates, Ltd., 295, Regent-street, W.1, are to erect a block of shops, with suites of offices, etc., above. The contract has been placed with Messrs. Bovis, Ltd., 35, High-street, W.1. The plans have been prepared by Messrs. E. Howard and Partners, 3, St. James's-street, S.W.1.

Old Broad-street. — EXTENSIONS.—Messrs. Samuel Montague and Co. are making alterations and extending their premises. The architects are Messrs. Wimperis, Simpson and Guthrie, 61, South Molton-street, W.1, and the building work is being carried out by Messrs. C. R. Price, 107, Bishopsgate, E.C.2.

Oxford-street. — REBUILDING. — Messrs. Waring and Gillow, Ltd., are to rebuild and improve the corner of their Oxford-street frontage, nearest to Oxford-circus. No contracts have been placed yet. The plans have been prepared by Messrs. Elcock and Sutcliffe, FF.R.I.B.A., Adam House, Strand.

Park Royal.—EXTENSIONS.—Messrs. Ilford, Ltd., are to make extensions to their factory. The contractors are Messrs. A. E. Symes, Ltd., 1a, Carpenters-road, Stratford, E. The architect is Mr. W. J. Lewis, A.R.I.B.A., Cranbrook House, Cranbrook-lane, Ilford.

Park Royal. — EXTENSIONS. — Messrs. Vi-Springs, Ltd., contemplate extensions to their works in Victoria-road, N.W.10. A contract for the building works has been placed with Messrs. McLaughlin and Harvey, Ltd., 24, Highbury-grove, N.9. The plans have been prepared by Mr. A. Alban H. Scott, F.R.I.B.A., 30, Bouverie-street, E.C.4.

Porchester-terrace.—FLATS.—The Paddington B.C. has approved an application by Messrs. Welch, Cachemaille-Day and Lander, 7, New-square, Lincoln's Inn, W.C.2, for consent to the proposed building line of a block of flats upon the site of 48, Porchester-terrace, to abut upon Porchester-gardens.

Red Lion-square. — EXTENSION. — Messrs. Hall, Beddall and Co., Ltd., Pitfield Wharf, Waterloo Bridge, S.E.1, have secured the contract for extensions to the premises of Messrs. Austin Reed. The architect is Mr. P. J. Westwood, F.R.I.B.A., 14, Buckingham-street, Adelphi, W.C.2.

Romford.—HALL.—Plans have been prepared by Mr. S. Philips Dale, F.R.I.B.A., 63, High Holborn, W.C.2, for a new church hall and institute at Rush Green. No contracts yet.

Shepherd's Bush.—BUILDING.—The L.C.C. has recommended a plot of land at Wormholt estate with frontages to Western-avenue and Wood-lane, be let on building lease to Mr. E. Mearles, for a block of lock-up shops.

Southwark.—GARAGE.—The Dispatch Motor Co., Ltd., 14, Southwark Bridge-road, S.E.1, have accepted the tender of Messrs. G. Newton and Hill, Ltd., 93, Southwark Bridge-road, S.E.1, for a garage, workshops, stores, etc., at a cost of about £15,000. The plans have been prepared by Messrs. Wallis, Gilbert and Partners, Coastal-chambers, Buckingham Palace-road, S.W.1.

Stepney.—HOUSING.—The B.C. are to invite tenders for construction of block No. 6, to consist of 20 dwellings, at Limehouse Fields, E.14, and for three cottages at Church-row, Limehouse, E.14. The plans are by Mr. B. J. Belsher, Borough Engineer and Surveyor.

Stonebridge Park. — PREMISES. — Messrs. J. F. MacKenzie, builders, 40, Watford-way, N.W.4, are carrying out a scheme for the erection of new premises at Stonebridge Park, N.W., from plans prepared by Mr. H. J. Hewlitt, F.S.I., Abbey House, Melcombe-street, N.W.1, and not as stated in our issue of June 9.

Surbiton.—HOUSES.—Messrs. Goodhew and Coleson, 2, The Mall, Ealing, W.5, are erecting 200 houses on the Parkside estate. The plans have been prepared by Mr. R. A. C. Churchward, 12, Victoria-street, S.W.1.

Tolworth.—HOTEL.—The tender of Messrs. H. and J. Taylor, Canada House, Hither Green-lane, S.E.13, has been accepted by Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End-road, E.1, for the proposed Tolworth Hotel, at the corner of the Kingston by-pass-road with Ewell-road. The cost will be about £17,000. The plans have been prepared by the brewery architect, Mr. S. J. Funnell.

Watford.—ALTERATIONS.—Messrs. Benskin's Watford Brewery, Ltd., are to make additions to their Clarendon Hotel in Station-road. The contractors are Messrs. H. Brown and Sons, Whippendell-road, Watford. The plans have been prepared by the brewery architect, Mr. J. F. C. James, A.R.I.B.A.

Watford.—SHOPS.—The first section of an important block of shops, flats and offices is now in course of erection at the junction of High-street and Rickmansworth-road, by Watford Ideal Homes, Ltd. The architects are Messrs. Ley, Colbeck and Partners, FF.R.I.B.A., 214, Bishopsgate, E.C.2, in conjunction with Messrs. Warren and Lidbetter, FF.R.I.B.A., 12, Norfolk-street, Strand.

Wembley.—ESTATE.—Plans have been prepared for a new road and 70 houses on the Clayton Farm estate, Clifford-road, for the Clayton Farm Estate, Ltd. The architect is Mr. Herbert Kenchington, F.R.I.B.A., 108, High-street, Wembley.

Wimbledon. — EXTENSIONS. — Plans have been approved for extensions, including a new residential wing, to the Southdown Hall Hotel, Lansdowne-road, S.W.20. The cost is estimated at approximately £9,600. The architect is Mr. Stanley Waghorn, A.R.I.B.A., 22, Essex-street, Strand, W.C.2, and the builders are Messrs. J. Jarvis and Sons, Ltd., 8, Wormwood-street, E.C.2. All the subcontracts have been arranged.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st JUNE, 1933.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Accrington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Aldershot	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Alfreton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Alnwick	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Altrincham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ashford (Kent)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Ashington	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Ashton-under-Lyne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Aylsham	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Banbury	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Barnsley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Barnstaple	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Barrow-in-Furness	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Barry	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Basingstoke	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bath	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Bedford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Berwick	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bexhill	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Birkenhead	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Birmingham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bishop Auckland	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Blackburn	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Blackpool	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bognor Regis	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Bolton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bournemouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Bradford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford-on-Avon	1/2	1/2	1/2	1/2	1/2	1/2	1/1	10½
Braintree	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Brentwood	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bridgwater	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bridlington	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brighton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Bristol	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bromsgrove	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bromyard	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	10½
Bungay	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Burnley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Burton-on-Trent	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bury	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bury St. Edmunds	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Buxton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cambridge	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Canterbury	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Cardiff	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Carlisle	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chatham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Chelmsford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Cheltenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Chester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chesterfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chorley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cirencester	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/1½	11
Clacton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Colchester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Coventry	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cranbrook	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Crewe	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cromer	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Darlington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Deal	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Denbigh	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Derby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Devizes	1/2	1/2	1/2	1/2	1/2	1/2	1/1	10½
Dewsbury	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Doncaster	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dorchester	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/1½	11
Dorking	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Dovercourt	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Driffield	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Droitwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Dudley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Durham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Eastbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
E.Glam. (Mon.Val.)	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Ely	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Exeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Exmouth	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Fakenham	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Felixstowe	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Folkestone	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Frome	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/1½	11
Glossop	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Gloucester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Godalming	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Goole	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gosport	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Grantham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Gr. Yarmouth	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Grimsby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Guildford	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Halifax	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Harpenden	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Harrogate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hartlepools	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Harwich	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hastings	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Hatfield	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Hednesford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Herne Bay	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Hertford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Hitchin	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hoddesdon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Holt	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Huddersfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hull	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hunstanton	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Huntington	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Isle of Wight	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Ipswich	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Keighley	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kettering	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Kidderminster	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
King's Lynn	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Lancaster	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leamington	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Leeds	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leicester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1 5½	1/1½
Leighton Buzzard	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Lichfield	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lincoln	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Littlehampton	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Liverpool	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Llandudno	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Llanelly	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
London—								
12 m. radius	1/7	1/7	1/7	*	1/7	1/7	1/6	1/2½
12-15 m. radius	1/6½	1/6½	1/6½	*	1/6½	1/6½	1/5½	1/2
Loughborough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lowestoft	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Luton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Macclesfield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Malvern	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Manchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Mansfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Margate	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Market Harborough	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Matlock	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Melton Constable	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Melton Mowbray	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Merthyr Tydfil	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Middlesbrough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newark	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newbury	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Newcastle-on-Tyne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newcastle-u.-Lyme	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
New Forest	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Newmarket	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Newport, Mon.	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Northampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Norwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Nottingham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nuneaton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oakham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Oldham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oxford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Paignton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Peterborough	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Plymouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Pontypridd	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Portsmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Preston	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ramsgate	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Reading	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Redcar	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Redditch	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reigate	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Retford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Ripon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Rochdale	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Rugby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Saffron Walden	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
St. Albans	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
St. Helens	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Sawbridgeworth	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Saxmundham	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	10½
Scarborough	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sevenoaks	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Sheffield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Shrewsbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sittingbourne	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Southampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Southend-on-Sea	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Southport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
South Shields	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stevenage	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Stockport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stockton-on-Tees	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stoke-on Trent	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stourbridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stourport	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stowmarket	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Stratford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Stroud	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3	11½
Sunderland	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Swaffham	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Swansea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Swindon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/-
Tamworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Taunton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Thetford	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Torquay	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Totnes	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3	11½
Trowbridge	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/1½	11
Tunbridge Wells	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Uttoxeter	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wakefield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Walsall	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Walsden	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Warminster	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Warrington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Warwick	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wells (Norfolk)	1/1	1/1	1/1	1/1	1/1	1/1	1/1	9½
Welwyn Gar. City	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
West Bromwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weston-super-Mare	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Weymouth	1/3	1/3	1/3	1/3	1/3	1/3	1/2	11½
Whitby	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wigan	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Winchester	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Windsor	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Wisbech	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Wolverhampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Woodbridge	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Worcester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Worksop	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worthing	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Wrexham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wycombe	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/-
Wymondham	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	10½
York	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½

* The rate recognised by the National Association of Operative Plasterers as and from 1st June, 1933, is 1/7 per hour.

For Building Trade wages in Scotland, see page 1065.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issue. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JULY 3.

Bedale (Yorks).—Houses.—At Aiskew, for the R.D.C. Clerk. Dep. £1 1s.

Castlebar.—Additions.—Also alterations to St. Patrick's Monastery, for Rev. Brother Brendan, Provincial of De La Salle Order, Castletown, Mountrath, Leix. R. M. Butler, F.R.I.B.A., architect, 82, Merrion-sq. South, Dublin.

Coseley.—Houses.—32, including drainage, fencing, &c., at Lanesfield estate, for U.D.C. J. C. Roper, clerk. Dep. £2 2s.

Darlington. — Alterations. — To Arthur Pease School, Darlington Training College. J. Potts & Son, architects, 57, John-st., Sunderland.

Glasgow.—Alterations to Maryhill police office, for Corporation. D. Stenhouse, T.C.

Halstead.—Cottages.—20 non-parlour type on Kings head housing estate, for U.D.C. W. A. Nicholson, S.

Highworth.—Houses.—Four non-parlour type at Station-rd., Chiseldon, for R.D.C. R. J. Beswick & Son, F.R.I.B.A., architects, 10, Victoria-rd., Swindon. Dep. £2 2s.

Ilkeston.—Restoration.—Also repair of stonework and brickwork, Free Library, for T.C. B.S.

Isle of Axholme.—Houses.—24, for R.D.C. John T. Battye, S. Dep. £2.

Kingston-upon-Hull.—Installation.—Of low pressure hot water, heating and domestic hot water supply apparatus for proposed Maybury-rd. and Pickering-rd. Schools, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £1 1s each

Lisburn.—Disinfecting Station.—For U.D.C. Town Surveyor. Dep. £1 1s.

Lowestoft.—Painting, etc.—At St. Luke's Hospital, for London C.C.—Chief Engineer, (B) County Hall, Westminster Bridge, S.E.1. Dep. £1.

Margate.—Cleansing.—Also painting and repairs at Princess Mary's Hospital for Children, Cliftonville, for L.C.C. Chief Engineer (B), County Hall, Westminster Bridge, S.E.1.

Oldham.—Convenience.—In Counthill-rd., for C.B. B.E. and S. Dep. £1 1s.

Northampton.—Houses.—76 non-parlour type on St. David's estate, for C.B. A. Fidler, B.E. Dep. £5.

Portsmouth.—Depot.—Central depot, Eastern-rd., for T.C. City E. Dep. £1 1s.

Saddleworth.—Decoration.—Of Mechanics' Institute, Uppermill, for U.D.C. A Lancashire, clerk.

Saffron Walden.—Houses.—Four, in parish of Ashdon, for R.D.C. A. E. Pitstow, S., 25, West-rd. Dep. £3 3s.

Shoreditch.—Public Conveniences.—At High-st. and Calvert-av., for L.C.C. Clerk, County-hall. Dep. £2.

Swansea.—Installation.—Electrical installation at Mayhill temporary school, for E.C. Borough Architect, 3, Prospect-pl.

Swindon.—Showrooms.—Also public lavatories in Regent-circus, for T.C. J. B. L. Thompson, B.S., 34, Regent-circus. Dep. £2 2s.

Thurles.—Houses.—137, for U.D.C. J. M. Kennedy, T.C. Dep. £10.

Torquay.—Conveniences.—At Walls Hill, Babbacombe and Petitor Downs, St. Marychurch, for T.C B.E. Dep. £2 2s.

JULY 4.

Birmingham.—Painting.—Exterior at Erdington House, Erdington, for T.C. Public Assistance Officer, 102, Edmund-st.

Coseley.—Conversion.—Of buildings to office accommodation at Council House, for U.D.C. J. C. Roper, clerk. Dep. £2 1s.

Crosland Moor. — Bungalow.—In Balmoral-av. Lunn & Kaye, architects and surveyors, Milnsbridge.

Dewsbury.—Houses.—10, at Lees Holm, Thornhill Lees, for C.B. Borough Architect and Surveyor. Dep. £1 1s.

Dover.—Restoration.—External (Part III.) of Town Hall, for T.C. Wm. Boulton Smith, B.E. Dep. 10s. 6d.

Dublin.—Painting.—At Royal Hospital and various buildings, for Commissioner of Public Works. T. Cassedy, secretary, Offices of Public Works. Dublin. Dep. £1.

East Kesteven.—Painting.—Internal of Council offices, Northgate, Sleaford, and external of Council houses, Great Hale, and Kirby-la-Thorpe, for R.D.C. E. H. Sills, architect.

Hertford.—Alterations.—At The Castle, for Corporation. B.S.

Ireland.—Building.—National school at Lettercran, Co. Donegal; improvements to Clooneagh National school, Co. Leitrim; National school at Coolcullen, Co. Kilkenny; station for the Garda Siochana at Daingean, Offaly; station for the Garda Siochana at Glenbeigh, Co. Kerry, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1 each

Kingston-upon-Thames.—Houses on Kingston Housing site, for the Corporation. Town Clerk, Municipal Offices. Dep. £2 2s.

Portsmouth.—Fencing.—Mild steel and cast-iron fencing at North End recreation ground, for T.C. City E. Dep. £1 1s.

Sutton Coldfield.—Painting.—Town hall and Council House, for T.C. Percy Parr, B.E. & S.

Wakefield. — Extensions. — Eastmoor Council school, for T.C. P. Morris, architect, Town Hall.

Whickham.—Houses—49, Whickham housing No. 2 Site, Broom Lane, for U.D.C. Thos. Fenbow, S. Dep. £20.

JULY 5

Burton-upon-Trent.—Extensions to casual wards at Belvedere House, for C.B. B.S. Dep. £2 2s.

Chatham.—Alterations.—At Ordnance-st. Council (girls') school, for T.C. Clerk to E.C. Dep. £3 3s.

Dublin.—Heating.—At Female Catholic Hospital, 1, James's-st., for Board of Assistance. J. W. O'Sullivan, architect, 102, Grafton-st.

Dunstable.—Installation.—Of electric lighting in open-air market, High-st. North, for T.C. F. Seath, acting B.S. Dep. £1 1s.

Lissaneville.—House.—For Irish Land Commission. M. Deegan, secretary, Irish Land Commission, Upper Merrion-st., Dublin. Dep. £1.

Stockport.—Superstructure to pump house and screening chamber to cooling towers at Millgate works, for C.B. W. F. Gardner, B.S.

Walsall.—Painting.—Schools for T.C. J. Taylor, B.E. and S.

JULY 6.

Bo'ness.—Floor.—Lifting and re-laying of Town Hall floor, for T.C. W. Beattie, B.S.

Bootle.—Building workshops and alterations to conveniences, junior technical school, Balliol-rd., for C.B. B.E. Dep. £1.

Breconshire.—Painting.—Schools for C.C. H. C. W. Strickland, County Architect's Dept., Watton Offices, Brecon.

Bromley.—Alterations.—And additions to central fire station, Chislehurst-rd., Orpington, for R.D.C. Building Surveyor. Dep. £1 1s.

Croydon.—Cottages and Flats at Long-lane Fire Station, for Croydon Corporation. Town Clerk, Town Hall. Dep. £2 2s.

Edinburgh.—Heating.—Heating installation at David Kilpatrick School, North Junction-st., Leith, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Glandwr.—Chapel House.—For Glandwr Congregational Church. W. Thomas, Rhydcoedbach, Glandwr, Hebron. S.O.

Glasgow.—Extensions.—To St. Charles's School, Kelvinside-gardens, N.W., for Corporation. Education Offices (Property Department), 129, Bath-st., Glasgow, C.2. Dep. £1 1s.

Glasgow.—Houses.—54, Shawpark-st. housing scheme, for T.C. D. Stenhouse, T.C.

Kilkeel.—Painting.—At Mourne district hospital, for Governors. M. O'Rourke, secretary.

Kingston-upon-Hull.—Installations.—Electric light installations at Pickering-rd. and Maybury-rd. schools, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £1 1s. each.

Leeds.—Plumbing Repairs.—On various housing estates, for T.C. J. E. Acfield, City E.

Newcastle-on-Tyne.—Walls.—Brick walls at rear of 36 flats in Watson-st., Walker, for Corporation. Housing Architect, 18, Cloth Market.

Newry.—Additions.—Also alterations at Custom House, for Government of Northern Ireland. R. E. Thornley, Assistant Secretary, Ministry of Finance, May-st., Belfast.

Wakefield.—Renovations.—Also asphalting playgrounds, at schools in Ackworth, Brierley, Hemsworth and South Elmsall districts, for West Riding C.C. C. L. Crossley, Divisional Clerk, 8, St. John's North, Wakefield.

Wokingham.—Houses.—36 semi-detached, non-parlour, 3-bedroom type, for R.D.C. C. Aldridge, building surveyor.

JULY 7.

Becontree.—New school, for the Barking T.C. Director of Education, Barking. Dep. £5.

Beddington.—Cottages in Beddington-lane, for C.B. of Croydon. Town Clerk, Town Hall, Croydon. Dep. £2 2s.

Bristol.—Houses.—Bedminster Housing site, 116 houses, and Dings area, 4 houses and 4 shops, for T.C. H. M. Webb, City E. & S., 51, Prince-st. Dep. £1.

Chichester.—New County Offices, for the West Sussex C.C. Clerk, County Hall.

Ealing.—Elementary School.—At Perivale, for the Corporation. Town Clerk, Town Hall, W.5. Dep. £3 3s.

Egham.—Building.—Strong room and alterations to fittings in collector's office at Council Offices, High-st., for U.D.C. E. and S.

Elgin.—Houses.—100 at Kingsmills, for T.C. J. and W. Wittet, F.L.R.I.B.A., 81, High-st.

Erdington.—Installation.—Of heating and hot-water service apparatus at post office and telephone exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Erith.—Additions.—Also alterations at Manor-rd and Crescent-rd. schools, for U.D.C. H. Hind, architect. Dep. £1 1s.

Highgate.—Flats at North-rd., for the Hornsey Corporation. Town Clerk, Town Hall. Dep. £2.

Hull.—School.—Senior portion, Maybury-rd. school, for 520 pupils, for E.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £1 1s.

Inverness.—Alterations.—Also additions to Beauly School and Eriskay School, South Uist, for C.C. R. Robertson, C.S., 26, Bank-st., Inverness.

Llanddowror.—Renovations.—To Tabernacle C.M. Chapel. H. Evans, Wood House, St. Clears.

March.—Building.—For headquarters of County Library, for Isle of Ely C.C. R. D. Robson, County Architect, County Hall, March.

Willesden.—Washhouses.—Public baths and washhouses, Granville-rd., Kilburn, for U.D.C. F. Wilkinson, E. Dep. £10 10s.

JULY 8.

Askern.—Conversion.—Of "Manor Bathe House," to two bungalows, for P.C. J. Haslegrave, Clerk, Station-rd.

Brighouse.—Decorations.—Internal of secondary school for girls, for Governors. J. S. Hird, clerk.

Darton.—Conversion.—Of privies into water-closets, for U.D.C. Harold Hobson, Chief Sanitary Inspector.

East Calder.—School.—For Midlothian C.C. County Architect, 10, Drumsheugh-gardens, Edinburgh, 3.

Findern.—Additions.—To Council School, for Derbyshire E.C. G. H. Widdows, C.A. Dep. £2 2s.

Haddington.—Houses.—2 semi-detached cottages of 3 apartments, at Florabank for T.C. W. W. Reid, F.F.A.S., Burgh Architect, 14, Court-st.

Pembrokeshire.—Painting.—Various schools for C.C. O. T. Thomas, County Architect, Haverfordwest.

Pembrokeshire.—Building Repairs.—To various schools, for E.C. O. T. Thomas, County Architect, Haverfordwest. Dep. £2 2s.

Preston.—Alterations.—Also additions to maternity block at Sharoe Green Hospital, Fulwood, for C.B. W. Platt, B.E. and S., Birley-st. Dep. £1.

Queensbury.—Painting.—External of schools for District E.C. E. B. Nelson, Education Office, Bingley.

Rochdale.—Pointing.—7 houses, 29 to 41, Jackson-st., Rochdale, for Morning Star Friendly Collecting Society. J. Midgley, secretary.

Sowerby Bridge.—Renovations.—Burnley-rd. Council school, Mytholmroyd—internal renovations; Stones Council school, Ripponden—internal and external renovations, pointing to school and boundary wall, for West Riding E.C. H. E. Booth, Divisional Clerk, Education Office, Allan House, Sowerby Bridge.

Tamworth.—Houses.—194, and construction of roads and sewers at Bolehal, for T.C. A. O. Marshall, B.E. & S.

West Riding.—Renovations.—Of Thorne Moorends Temporary C.; Hatfield; Dunscroft Council; Hatfield Doncaster Road Council; Stainforth Council; Snaith Council; Airmyn Council; Ousefleet Council; for C.C. E. L. Harrap, Education Offices, Goole.

JULY 10.

Askern.—Installation.—Of electric light at Askern Mose-rd. new infants' school, for West Riding C.C. Education Officer, County Hall Wakefield.

Barrow-in-Furness. — Painting. — Of Walney bridge and Michaelson-rd. bridge, for C.B. B.E.

Callington.—Houses.—15 terrace-type in Launceston-rd., for U.D.C. G. R. Hancock, clerk.

Cleethorpes.—Sub-station.—On Grimsby-rd., for U.D.C. L. W. Pye, E. and S.

Conway.—Painting.—Suspension bridge and water pipes over River Conway, for Conway and Colwyn Bay Joint Water Supply Board. C. F. Farrington, Trinity-sq., Llandudno.

Fife.—Houses.—20 at Kincardine, for C.C. J. Fraser & Son, architects, 3, Randolph-st., Dunfermline.

Gravesend.—Renovation.—Cleaning and restoration of exterior of Town Hall, Police Station and Offices, High-st., for T.C. F. T. Grant, M.Inst.M., B.E. & S., 5, Woodville-terr.

Hoyland. — Installation. — Of low-pressure hot-water apparatus at Hoyland West-st. infants' new council school, for West Riding C.C. Education Officer, County Hall, Wakefield.

Liverpool.—Sub-station.—At Beacon-lane, for T.C. Land Steward and Surveyor.

London.—Painting.—Cleaning, repainting, etc., of Hammersmith Bridge, for L.C.C. Chief E. (A), County Hall, Westminster Bridge S.E.1. Dep. £1.

Lowestoft.—School.—Section of new school at Notley-rd., for T.C. S. W. Mobbs, A.R.I.B.A., Town Hall. Dep. £2 2s.

Manchester.—Additions to house at Oakfield Farm, Chat Moss, for T.C. City Architect. Dep. £1 1s.

Norwich.—Houses.—50 on Dancefield housing estate, for U.D.C. F. L. James, S. Dep. £2 2s.

Sheffield.—Cleaning.—At Council schools and asphalting playgrounds, for Corporation. W. G. Davies, City Architect. Dep. £1.

Staines.—Shelter.—At Stanwell recreation ground, for U.D.C. D. C. Fidler, architect and surveyor.

Upton.—Installation.—Of (*a*) heating apparatus and (*b*) electric lighting and power equipment at Mental Hospital for Cheshire C.C. Sloan and Lloyd Barnes, consulting engineers, 34, Castle-st., Liverpool. Dep. £2 2s.

Wicklow.—Houses.—22 two-story, three-roomed, at Monkton Row, Upper, town of Wicklow, including laying of sewers, water-mains, etc., for U.D.C. J. T. O'Byrne, B.E., M.I.C.E.I., Wicklow. Dep. £5 5s.

JULY 11.

Birkenhead.—Sub-station.—In Cleveland-st., for Corporation. R. W. Johnston, City Architect. Dep. £1 1s.

Chesterfield.—Additions.—Also alterations to casual wards at Poor Law Institution for Derbyshire P.A.C. County Architect, Derby. Dep. £2 2s.

Guildford.—Painting.—Also sundry works at Council Cottages, for R.D.C. J. W. Wilton, E. and S.

Hinchley.—Houses.—12 non-parlour in new road off Mill-lane, Earl Shilton, for R.D.C. E. H. Cramp, architect, Barclay's Bank-chambs. Dep. £2 2s.

Kingsclere and Whitchurch.—Cottages.—Four, at East Woodhay and eight at St. Mary Bourne, for R.D.C. W. A. Cooper, clerk. Dep. £2 2s.

***Linton.**—Cambs.—Cottages at Horseheath and Linton, for the R.D.C. Clerk. Dep. £1 1s.

***Marsh Green, Dagenham.**—New Council school, for the Essex C.C. County Architect, County Hall, Chelmsford. Dep. £2 2s.

***Putney.**—Public Convenience, for the Fulham Corporation. Town Clerk, Town Hall, S.W.6. Dep. £2 2s.

Rugby.—Wiring.—Of 100 houses at Croop Hill, New Bilton, for T.C. D. E. Biart, T.C.

Scourie.—House.—For the Medical Officer, for Sutherland C.C.

Tullamore.—Cottages.—256 for Offaly County Board of Health and Public Assistance. Jas. F Mahon, secretary.

Walthamstow.—New Infants' School at Hale End-rd., for the Corporation. Director of Education, Education Offices, E.17. Dep. £2 2s.

JULY 12.

***Abingdon, Berks.**—Houses.—Drayton-rd. Town Clerk, The Abbey House. Dep. £2 2s.

Blackhill.—Painting.—Richard Murray Hospital, for Joint Board. T. W. Addison, secretary, Shire Hall, Durham.

Castleford.—Painting.—Grammar school. C. T. Lightley, Clerk to Governors, 77, Carlton-st.

Castleford.—Painting.—Technical Institute. C. T. Lightley, Secretary, 77, Carlton-st.

Cork.—Houses.—32, at Bishop's Field, for St. Mary's Utility Society, St. Mary's Hall. J. R. Boyd-Barrett, chartered architect, 61, South Mall. Dep. £2 2s.

Merton and Morden.—Railings.—Wrought-iron railings and gates at proposed recreation ground, George-hill, Epsom-rd., Morden, for U.D.C. G. Jerram, E. and S. Dep. £1.

Wallasey.—Open Air Swimming Bath at New Brighton, for the Corporation. Town Clerk, Town Hall. Dep. £3 3s.

NO DATE.

Birkenhead. — Installation. — Electrical installation in new Central Library. Gray, Evans & Crossley, architects, 51, North John-st., Liverpool.

Bray.—Houses.—26, for U.D.C. Clerk.

Cumberland.—Painting.—Various schools, for E.C. G. B. Brown, Director of Education.

Glandwr.—Cottages.—Two cottages at Glandwr, and new cowhouse at Aberiegan, Llanwenog. D. L. Price, auctioneer, Lampeter.

Goole.—Church.—Erection of St. Mary's Church and church hall, Old Goole. F. Turner, architect, Carlisle-st.

Morley.—Painting.—Various schools, for T.C. F. Turner, B.E.

Penistone.—Builder's Work.—At Loxley school, for West Riding E.C. J. H. Crabtree, Town Hall, Penistone.

Ravensthorpe.—Alterations.—Conversion of offices into 4 cottages, also 11 new cottages at Mirfield Colliery Company's site, North-rd. H. Brearley, architect, Westfield, Syke-lane, Earlsheaton, Dewsbury.

Southam.—Houses.—Two pairs of semi-detached and one block of four at Southam, for R.D.C. Quick & Lee, architects, 13, Waterloo-pl., Leamington. Dep. £1 1s.

MATERIALS, etc.

JULY 3.

East Sussex.—Bituminous Macadam.—For C.C. H. E. Lunn, C.S., Lewes.

JULY 5.

Gillingham.—Pipes.—Cast-iron pipes, etc., for T.C. W. H. Radford & Son, consulting engineers, Albion-chambs., King-st., Nottingham. Dep. £5 5s.

ENGINEERING, IRON AND STEEL.

JULY 3.

Nuneaton.—Sewage outfall works, at Hartshill, for T.C. R. C. Moon, B.E. and S. Dep. £2 2s.

Welwyn.—Sewerage.—For Wolmer Green sewerage and sewage disposal work, for R.D.C. D. Balfour & Sons, civil engineers, 47, Victoria-st., Westminster, S.W.1. Dep. £3.

Cricklade and Wootton Bassett.—Sewerage.—Also sewage disposal work, for R.D.C. Parker-Pearson & Ross Hooper, engineers, Dallas-chmbrs., Chippenham. Dep. £2.

Nottingham.—Engineering Work.—At City Mental Hospital, Mapperley, for T.C. J. Roger Preston, 10, Talbot Mansions, Museum-st., London, W.C.1. Dep. £3.

West Ham.—Bridge.—For Marshgate-lane cut and bridge, for Joint Committee of Lee Conservancy Board and West Ham Corporation. Joint Engineers, 21, Surrey-st., Strand, W.C.2. Dep. £10.

Whalley.—Sewage Works.—For Clitheroe R.D.C. A. Brooksbank, E., 14, The Exchange, Bradford. Dep. £2 2s.

JULY 4.

Downpatrick.—Drainage.—14 tons of mild steel reinforcement for concrete work at Quoile River drainage scheme, for Government of Northern Ireland. Secretary, Ministry of Finance, May-st., Belfast.

JULY 6.

Nottinghamshire.—Widening.—L.M. and S. Rly. bridge No. 16 over Nottingham-Bawtry-rd., near "White Post" Inn, Farnsfield, and bridge over Chesterfield canal, at Carolgate, Retford, for C.C. J. Cracroft Haller, C.S., Nottingham. Dep. £2 each work.

Tenterden.—Water Supply.—For parishes of Stone-cum-Ebony and Wittersham, for R.D.C. Ivo T. Emberson, clerk.

JULY 8.

Gillingham. — Sewerage.—Cast-iron pipes and specials, for T.C. W. H. Radford & Son, consulting engineers, Albion-chmbrs., King-st., Nottingham. Dep. £5 5s.

Lancashire.—Bridgeworks.—New bridge over Leeds and Liverpool Canal on Maghull diversion of Ormskirk and Liverpool-rd., and strengthening of Tarnbrick railway bridge on Preston and Blackpool-rd., for C.C. County Surveyor and Bridgemaster, Preston.

Mitcham.—Heating.—Extension of steam heating system by calorifiers for heating and domestic hot water services in wards Nos. 2, 3, 7 and 9, and work in connection, at Isolation Hospital, Beddington Corner, Mitcham Junction, for Wandle Valley Joint Hospital Board. E. W. Gunner, clerk. Dep. 10s. 6d.

Newbury.—Dam.—Across canal basin off River Kennet, for T.C. E. H. Hutton, B.S.

ROAD, SEWERAGE AND WATER WORKS.

JULY 3.

Cannock.—Drainage.—Storm water drainage of Church-st., Hednesford-st., Hollies-av., Brewery-av., to Ridings Brook, Mill Green, for U.D.C. R. Blanchard, E. and S. Dep. £2.

Peterborough.—Main.—Cast-iron water main at Etton waterworks, for T.C. W. H. A. Court, City E., Broadway. Dep. £2 2s.

Slough.—Reconstruction.—Of Windsor-rd. from Albert-st., for U.D.C. A. Bromly, E.

Sunbury-on-Thames. — Making-up. — Of Willoway, Dunally-park, Shepperton, for U.D.C. H. F. Coales, E. & S. Dep. £2 2s.

Swansea.—Paving.—Tar pavings, etc., at Mayhill temporary school, for E.C. Borough Architect, 3, Prospect-place.

JULY 4.

Enniskillen.—Sewers.—In Belcoo, for R.D.C. F. E. Townsend & Son, engineers.

JULY 5.

Carlisle.—Asphalt.—48,750 sq. yds. of two-coat steam rolled asphalt, including concrete and macadam foundations, for C.B. P. Dalton, City E. & S., 18, Fisher-st. Dep. £2 2s.

Chailey.—Mains.—Laying and jointing of about 2,425 yds. of 6-in. and 1,700 yds. of 4-in. Staveley spun water mains and work between west parish boundary south rd., Wivelsfield and Chailey Institution, East Chiltington, for R.D.C. A. F. Perkins, clerk. Dep. £2 2s.

Clacton.—Sewer.—In Woodrows-lane, Cottage-grove and Bockings-grove, for U.D.C. Wm. Aiston, S.

Hove.—Making-up.—Of Woodhouse-rd., for T.C. T. R. Humble, B.S.

Kingston-upon-Thames.—Reconstruction.—Of four sections of Richmond-rd., for T.C. B.S. Dep. £1 1s.

Tynemouth.—Reconstruction.—Of number of back streets in concrete, for C.B. J. L. Beckett, B.S. Dep. £2 2s.

Yeovil.—Water Supply.—At Ash and Long Load, for R.D.C. C. A. Wilson, S., 28, Kingston, Dep. £2 2s.

JULY 6.

Bromley.—Sewer.—800 yds. 9 in. stoneware sewer, with manholes and other incidental work in Goddington-lane, Orpington, for R.D.C. T. Watson, E. Dep. £2 2s.

Ealing.—Making-up.—Of St. Augustine's-av., Cleveley-crescent, Queen Anne's-gardens, and Cleveley-rd., for T.C. W. R. Hicks, B.E.

Kent.—Roads.—Surfacing with asphalt, two coat work, 3 inches in thickness, three sections of London-Folkestone road, between Maidstone and Lenham, for C.C. H. T. Chapman, C.S., St. Peter-st., Maidstone.

Leeds.—Paving.—13 various roads, for T.C. E. W. Cockerlyne, Highways E., 155, Kirkstall-rd., 4. Dep. £1 1s.

Southend-on-Sea.—Making-up.—Of Clieveden-rd., Leasway and St. George's-drive sewer, for C.B. R. H. Dyer, B.E. & S. Dep. £1 each.

JULY 7.

Fleet.—Extension.—Four miles of cast-iron and stoneware sewers, brick and concrete manholes, ventilating columns and incidental work, for U.D.C. E. Nash, Clerk.

***London.**—Drainage.—Roadways and drainage, etc., at Post Office Research Station, Dollis-hill, N.W.2, for H.M.O.W. Room 65D., Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

JULY 8.

Gillingham.—Mains.—4,150 yds. of stoneware pipe, concrete tube and cast-iron pipe sewers, at Rainham, for T.C. W. H. Radford & Son, civil engineers, Albion-chmbrs., King-st., Nottingham. Dep. £5 5s.

Kidderminster.—Water Supply.—At Knoll-hill and Broom, for R.D.C. A. S. Northover, S.

Skegness.—Roads.—Also soil and surface water sewers at Seacroft estate, Drummond-rd., for U.D.C. S.

Wakefield.—Streets.—Street works in Tadman-st. and 6 private streets, for T.C. City S.

Wimbledon.—Making-up.—Of Salisbury-rd., for Corporation. B.E. and S. Dep. £2 2s.

Public Appointments.

JULY 10.

***Barrow-in-Furness.**—Clerk of Works, by the Corporation. Town Clerk, Town Hall.

CURRENT & PROPOSED BUILDING WORK*

Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board, Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk; T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Aberdeenshire.—Public Health Committee proposed 394 new houses.

Ambleside.—U.D.C. approved conveniences, White Platts recreation ground.

Arnold.—U.D.C. to purchase land adjoining Cross Keys, subject to approval of M.H., as site for houses for aged persons.

Barnsley.—P.A.C. propose children's homes to accommodate 24 children, at £1,500. H. Taylor, B.S.

Batley.—Rev. P. McBride, P.P., St. Mary of the Angels, propose extensions to schools.

Belford.—U.D.C. approved: 3 houses in King-st., Seahouses, for Lord Runciman, Mauchlin & Weightman, architects, Newcastle.—Parish church hall, North Sunderland, Hicks & Charlewood, architects, Newcastle.—Revised lay-out plan and type of house plan, Dell Point, Craster estate, Beadnell, Hicks & Charlewood, Newcastle, also Harbour Site, Craster estate, Beadnell.—Lay-out of estate at Seahouses for executors of late J. Scott, G. Reavell, architect, Alnwick.

Belper.—British Legion propose club-house off Allestree-rd.

Birmingham.—P.A.C. propose child welfare centre, Marsh-lane, Erdington, at £5,664. Architects, Nichol and Nichol, 117, Colmore-row.

Blackburn.—Rev. J. Cyril Gornall, P.P., Holy Souls' Church, Ramsgreave-rd., proposes elementary school for Brownlow, Roe Green and Teak-st. area. Cost, £6,000. Appointment of architect not been definitely settled.

Boston.—Boston Hospital Management Committee proposing nurses' home on portion of South End-pk.—Restoration Committee of Parish Church, additions. Sir Charles Nicholson, architect.

Boston.—W. Mason & Son, Strait Bargate, and S. T. Hopper, Strait Bargate, proposing rebuilding premises. Architect, Hedley A. Mobbs, 38, Market-place. Contracts not let.

Bournemouth. — T.C. approved:—church hall (corner), Ropley and Colmore-rds., Deacons of the Richmond Hill Congregational Church; shops, hotel and flats, Westover-rd., The Palace Hotel Co.

Bradford.—Miners' Welfare Committee, London, to build pithead baths at Toftshaw Colliery, Dudley Hill, and tenders invited. Plans by J. H. Forshaw, architect to Committee, Dean Stanley-st., London, S.W.1.—E.C. propose transformer chamber, Dick-lane, at £5,723.

Bradford.—Health Committee approved plans two blocks of tenements in White Abbey. Cost, £40,000. J. A. Fletcher, City Architect.

Bridge Trafford.—H. Beswick & Son, architects, 19, Newgate-st., Chester, preparing plans for rebuilding "Nag's Head" Hotel. Contracts not let.

Brighouse.—T.C. approved: E. & F. Lapish, 11 houses, St. Chad's-av.

Buxton. — Parochial Council of Fairfield Parish Church proposing a church hall. Architects, Flint & Saynor, 4, Grove-parade. Estimated cost, £3,000.

Cannock.—Trustees of Old Hednesford Wesleyan Mission Church propose additions. Architect, J. Quimby, 40, Cross-st., Heath End, Pelsall, Walsall.

Carlisle.—T.C. approved: Extensions to wafer room, Railway-st., Carr & Co., Ltd., per H. E. Scarborough; 18 houses, Freer-st., J. & R. Bell, Ltd., per H. Foxall; extensions, Cumberland Infirmary, Infirmary Building Committee, per S. W. B. Jack.

Carmarthenshire.—Painting various schools, for the E.C.:—Cilfrifithin and Cwmgwili, J. P. Morgan, Gorlas; Velingwm, J. Williams, Abergwilli; Bankfoseefflen, E. E. Richards, Pontyates, via Llanelly; Mydrim, T. Davies, Mydrim; Ammanford Inter, Owen Madden, Ammanford; Penygroes, J. P. Morgan, Gorslas; Brynamman (M.), H. Evans & Son, Brynamman; Parcyrhun, T. Lancett & Son, Parcyrhun; Llandilo Inter, Pritchard Davies, Llandilo; Llandovery Inter, J. Johnson, Llandovery; Dolgwm, T. Davies, Llanbyther; Rhydcwmmerau, T. Davies, Maesyderwen. Llansawel; Henllan-Amgoed, J. Ivor Davies, Whitland; Penygaer, D. Handel Thomas, Rhiw, Login, S.O.; Cwmbach, T. Davies, Myrdrim; Brynsaron, T. Lloyd Davies, Wellfield N.C. Emlyn; Llanelly Inter, J. W. S. Cole, Llanelly; Castle, Hy. Richards, Brynygraig, Mynyddygarreg; Bynea, A. T. Thomas, Llanelly; Felinfoel, J. Richards, Pleasant View, Felinfoel; Llwynhendy, D. Richards, Macon, Llwynhendy, Llanelly; Five-roads, E. E. Richards, Pontyates, Llanelly; Hendy, T. Lancett, 60, Panty, Pffryn; Burry Port, M. P. Rogers, Carmarthen; Pembrey, C. R. Gower, 47, Station-rd., Burry Port; Pwll (New), W. H. Davies, Burry Port; Trimsaran, Williams & Griffiths, Gwynfryn, Tsaran.

* See also List of Contracts, Competitions, etc.

***** In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.**

Chapeltown.—A site been acquired junction of Louis-st. and Chapeltown-rd, for church of The Holy Rosary.

Cheadle.—R.D.C. approved:—Copeland & Hancock, amended lay-out for 20 houses at Folly-lane, Cheddleton.

Chester.—Cheshire E.C. approved T.C. acquiring site in Newton-by-Chester for school accommodation.—Council resolved that application be made to M.H. for appropriation of site proposed for school on Lache housing estate.

Colne.—T.C. received from M.H. sanction to scheme comprising 62 A3 houses and 12 bungalows for aged persons. Tenders to be invited.

Congleton.—T.C. approved: 8 houses, Lambert's-lane, A. J. Pass.

Conisborough.—E.C. proposing £10,000 building school.

Coulsdon and Purley.—U.D.C. approved: Industrial Builders, Ltd., continuation of Sundale-rd. and York-rd., and 2 new streets and sewers Selsdon Park Farm estate, 5 prs. semi-det. houses, continuation of Sandale-rd., Selsdon; F. H. Willcocks, 47 houses, Braemar-ave., Sanderstead; E. H. N. Bate, 3 prs. semi-det. houses, St. Andrews-rd., Coulsdon; C. H. Ridge, 3 shops with living accommodation over, South side, Addington-rd., Selsdon; H.M. Office of Works, drainage of proposed post office, junction of Chipstead Valley-rd. and Lion Green-rd., Coulsdon.

Craghead.—Church at Craghead. I. Bulmer, secretary, 21, Rose-av., South Moor, Stanley.

Crook.—Workshops of W. Lax & Son, builder, to be rebuilt.

Darlington.—Scheme being considered for chancel for St. Luke's Church. Vicar, Rev. S. F. Warth.

Derby.—P.A.C. propose boiler house, laundry, etc., at Institution, at £6,687.

Dewsbury.—A. & F. Mosley, Ltd., 6, Wormald-row, Albion-st., Leeds, architects for licensed premises in Foundry-st., for Ind Coope & Co., Ltd., brewers, Burton-on-Trent.

Dorchester.—T.C. approved:—14 houses rear of Tubbs-rd., for Mill-st. Housing Society, Ltd.

Dudley.—T.C. approved:—Poole Bros., 97, Blackacre-rd., Dudley, 8 houses, Buffery-rd.; Lloyd Bros., Barrs-rd., Cradley Heath, 8 houses, Buffery rd.

Dudley.—Butler, Jackson & Edmunds, 8, Temple-row, Birmingham, architects for school on Blower's Green, for E.C.

Dukinfield.—Mark Warrington, Ltd., builders, Lodge-lane, Newton, Hyde, propose 12 houses, Cheetham Hill-rd. and Yew Tree-lane.

Durham.—R.D.C. to make application to M.H. for sanction to borrow money for 250 houses. J. N. Adams, S., Byland Lodge.

Eccleston.—Methodist Church members proposing extensions to Sunday-school.

Elgin.—Orders for demolition of 34 houses at High-st. and Bishopmill been issued by T.C. T.C erecting 80 three-roomed houses at Kingsmill.

Epsom. — U.D.C. approved:—24 semi-detached houses, Rutherwyke-close, Stoneleigh estate, C. E. Truett & Co.; 12 semi-detached houses, Chadacre-rd., Stoneleigh estate, C. E. Truett & Co.; public elementary school, for 384 scholars, in Pams Way, Ewell, Surrey E.C.; revised block plan for houses in London-rd., Cuddington, Stoneleigh estate, A. F. Houlton & Co., Ltd

Exeter.—City Council to erect 106 houses.

Falmouth.—T.C. approved: A. E. Batzer, re-building 44, Market-st., for Marks & Spencer Ltd.

Felling-on-Tyne.—U.D.C. received sanction of M.H. to borrow £1,250 for land on Felling House estate, for building purposes. C. Hall, S.

Gateshead.—Doggarts, Ltd., drapers and furnishers, Bishop Auckland, acquired premises in High-st., which they intend converting into modern stores at £30,000.

Glasshoughton.—R.D.C. seeking M.H. sanction to 12 houses in Park Dale. Plans by S.

Golborne.—Council approved:—8 houses, H. Heaton & Sons, in Barn-lane.

Gosforth.—U.D.C. proposes houses for working class.

Halifax.—H. Pickles, Hopwood Hall, architect for extensions to Church buildings for Friendly Methodist Church members.

Heckmondwike.—Heckmondwike and District Co-operative Society, Ltd., to erect houses in New North-rd.

Hemel Hempstead.—T.C. approved:—12 semi-detached houses, Belmont-rd., E. Hoar.

Herne Bay.—U.D.C. approved:—shop premises, High-st., Canterbury Co-operative Wholesale Society, Ltd., from L. G. Ekins, L.R.I.B.A.

Hornchurch.—City Corporation recommend £260 for work on jetty.

Hull.—Housing and Town Planning Committee to inform M.H. of their decision to embark on five-years' plan to clear 3,600 slum houses and build new ones to take their place.

Hyde.—T.C. approved:—14 houses, Johnson Brook-rd., J. Wheatley; 10 houses, Dowson-rd., F. Norgrove.

Jarrow-on-Tyne.—Corporation recommends J. Scott-Weir, B.E., to prepare plans and estimates for municipal hall.

Kilwinning.—War Memorial Committee agreed to erect war memorial in M'Gavin Public Park, provided suitable site can be obtained.

Knutsford.—Mere New Hall Estates, Ltd., 76, Mosley-st., Manchester, propose development of Mere Hall estate. Architects' Department, Commercial Estates, Ltd., 76, Mosley-st., Manchester.

Leeds.—Tenders being invited for extensions at General Infirmary Buildings. Plans by Kitson, Parish, Ledgard and Pyman, Lloyds Bank-chambers, Vicar-lane.—Plans prepared for additions to Leeds branch of Bank of England, Park-lane. Tenders being invited. Architect, A. Blomfield, London. Quantities by Thomas Priestley and Sons, Blenheim-terrace, Leeds.

Leicester.—Miners' Welfare Committee invites tenders for pithead baths at Whitwick Colliery, Coalville. Plans by J. H. Forshaw, architect, Dean Stanley-st., London, S.W.1.

Leyland.—U.D.C. proposing public baths.

Loftus.—M.H. inquiry been held into application of U.D.C. for sanction to borrow £2,000 to buy and adapt building for Council use.

London (Deptford).—B.C. recommend £110 on reconstruction work on Endwell-rd. bridge.

London (Fulham).—B.C. considering: Heckfield-place, Waltham-av., Lodge-av.; Fane-st., Fane-pl., and adjacent part of Star-rd., West Kensington; Albert-mews, off Field-rd.; Church path, off Lillie-rd.; Caroline-pl., off Lillie-rd., and Edithrow, off King's-rd., and other properties in connection with slum clearance work.—Council recommend £168 for converting stable at St. James' Home, Fulham Palace-rd., into sub-station and for constructing shed and carrying out other incidental works.

London (Poplar).—B.C. to purchase site at 24, Weston-st., for store.—Council recommend £740 for setting back railings of St. Stephen's Church, East India Dock-rd., in connection with road widening scheme.—Council sanctioned transformer house, East India Docks to abut upon Leamouth-rd.—B.S. estimates £840 for renovating six libraries.—Plans passed: W. J. Foster, 87, East India Dock-rd., E.14; addition, 237, East India Dock-rd., E.14; F. & T. Thorne, Manchester-rd., Cubitt Town, E.14., building to Snowdon, Sons & Co., Ltd., wharf, West Ferry-rd., E.14; Sutton & Ash, Ltd., 232, New Spring-st., Birmingham, additions, Sutton & Ash, Ltd., premises, Beachy-rd., by Roach-rd. E.3.

London (St. Pancras).—B.C. to spend £965 on alterations to electricity showrooms, Camden-rd.—Council to borrow £53,200 for site in Euston-rd. for new town hall.

London (Stepney).—B.C. recommend internal decoration of Mile End sub-station, at £370, and rebuilding defective wall at Princes-sq. sub-station, at £297.—Plans submitted to Council: E. Maufe, colonnade in advance of general building line in Philpot-st., at London Hospital Students' Hostel; H. V. Kerr, buildings, 67-75, New-rd.

Lowestoft.—T.C. approved:—G. A. Gaze, 16 bungalows, new road, Colville-rd., Oulton Broad; A. E. Ingles, 3 blocks 2 houses, Oulton-rd.; 1 block 2 houses, Wood's Loke.

Macclesfield.—R.D.C. propose additional houses, Woodford-rd., Poynton. J. H. Walters, E., Moody-cham., Congleton.

Mansfield.—Plans approved by T.C.:—10 houses, Eakring-rd., R. Lane; 18 houses, Chesterfield-rd., A. Farnsworth.

Maryport.—Maryport Co-operative Society, Ltd., proposing extensions to central premises, Curzon-st. Plans by H. Oldfield, L.R.I.B.A., 1, John-st., Workington.

Meridan.—R.D.C. approved:—10 houses, Coleshill-rd., Water Orton, W. Vaughan.

Middlesbrough.—E.C. proposes elementary school for 1,500 children on Whinney Banks estate. S. E. Burgess, B.E.

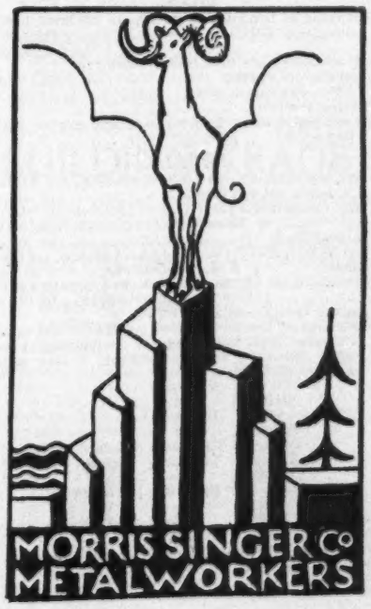
Middlesbrough.—Corporation to build 212 houses in connection with third instalment of five-years' housing programme.

Monkseaton.—Mr. Wardhaugh, builder, Monkseaton, to build 16 houses, Grange estate. Architects, Hill & Honeyman, Eldon-sq., Newcastle.

Morecambe.—Tenders invited for Christian Science Sunday school, Queen-st. Architect, S. G. Oldham, Bank-cham., 2, Lancashire-st.

Newburn-on-Tyne.—U.D.C. approved P. H. Oxnard, Whitley-rd., Whitley Bay, erecting further houses on Westerhope estate.

Newcastle-on-Tyne.—W. C. Leech, builder, Coutts-rd., prepared plans for 62 houses, Old Pit Yard site, Walker.—Vicarage is to be built in connection with St. Anthony's Church, at £2,500. C. S. Errington, 21, Grainger-st, West, architect.



Newquay.—U.D.C. approved:—V. W. Chapman, 12 houses at Headleigh-rd.

Newton Abbot.—Subject to approval from M.H., U.D.C. to build 24 houses on part of Brooking's meadow site at Broadlands.

Northallerton.—Plans approved by U.D.C. for 12 houses at rear of West View-ter., for T. Willoughby.

Nottingham.—J. D. Hossack, A.R.I.B.A., architect, 35, Maddock-st., London, W.1, preparing plans for shops and showrooms, King-st., for J. Lewis & Co., Ltd., silk mercers, Oxford-st., London, W.1.

Otley.—Additional block proposed at Isolation Hospital, Barrowgate, for Wharfedale Union Hospital Isolation Joint Committee.

Pontefract.—R.D.C. seeking borrowing powers for £35,000 required in connection with housing schemes at Brotherton, Ferrybridge and Whitley Bridge.

Preston.—T.C. approved:—J. H. Mangan (directors, Preston North End Football Club), new stand, Deepdale-rd; W. G. Crossthwaite (Mrs. A. Whitfield), 8 houses, Farringdon-lane.

Radcliffe.—U.D.C. propose additional bath and extensions to existing public bath, at £7,500. Plans by S.

Retford.—T.C. approved:—27 houses, Ollerton-rd., G. A. Fisher.

Rotherham.—R.D.C. received sanction to 150 further houses.

Rowley Regis.—U.D.C. received M.H. sanction to proceeding to obtain tenders for 10 non-parlour type three-bedroomed houses on Braemore estate and 87 houses of various types on Jibbitts Garden area.

Ryton-on-Tyne.—M.H. to be asked by U.D.C. to sanction £3,500 for purchase of land at Fern Dene, for stabling accommodation. J. Dalton, S.

Sale.—Cheshire C.C. propose welfare centre.

Scalby.—U.D.C. approved: 7 pairs of semi villas in Scholes Park-av., for E. G. H. Sharman.

Scarborough.—Wilkinson & Smith, architects, 6, Queen-st., preparing plans for 26 houses off Newlands Park estate, for W. H. Wardle.

Sedgefield.—M.H. sanctioned further 100 houses by R.D.C. by direct labour at over £23,000.

Sheffield.—T.C. propose alterations to offices at Tinsley transport depot.

Shipley.—U.D.C. approved plans for 24 houses, Taunton-st., W. Pitts & Sons; 18 houses, Claremont estate, F. Dalby.

Southampton.—T.C. approved: 8 houses, Moircres., H. Kendall; 11 houses, Moir-cres., H. Kendall; parish hall, Weston-lane, Vicar and Churchwardens; rebuild 122 to 126, St. Mary's-rd., Southampton Co-operative Society, Ltd.; additions, church, Dean-rd., Trustees of Bitterne Congregational Church.

Southend-on-Sea.—C.B. approved: 4 shops and 8 flats, Broadway-west, Dr. W. D. Watson; 3 shops and houses, London-rd., A. A. Robinson; 22 houses, Arundel-gardens, Taylor & Simmonds; shop and 6 flats, Lonsdale-rd., W. J. Standen; 8 houses, Mayfield-av., Tomkins & Smith; 10 houses and shops, London-rd., F. F. Ramuz; 7 houses, Tudor-gardens, Donovan & Whitaker.

Southport.—B.E. approved plans for extensions of Holy Trinity C. of E. School for Managers. G. Bradbury & Son, architects, 14, Cook-st., Liverpool.

South Shields.—T.C. approved:—showroom, etc., Woods-ter., South Shields Blind School; 10 houses in flats at Ethel-ter., R. Summerbell & Son; 18 houses, Wyngarth estate, Carruthers & Son; 12 houses in flats, Lawe-rd., J. W. Wood; lay-out of 68 houses and flats, Mortimer-rd., Morpeth-av. and Banbury-ter., Henderson Bros.

South Shields.—It is proposed that T.C. should acquire land at Simonside for housing. J. P. Watson, B.S.

Stalybridge.—Percy Howard, A.R.I.B.A., architect, 88, Mosley-st., Manchester, to prepare plans for adapting Mechanics' Institute as welfare centre.

Stockton-on-Tees.—Plans by T. W. T. Richardson, 57, High-st., for 12 houses, Westerleigh-av.

Stoke-on-Trent.—Wesleyan Circuit proposing Sunday school, Sandon-rd. Architect, C. W. Porter, 6, Market-sq., Stafford. Tenders invited shortly.

Sunbury.—Council approved plans for new premises of Sunbury Ex-Service Men's Club.

Thorne.—P.C. propose chapel, cemetery, at £800.

Tynemouth.—Road construction schemes involving £48,720 to be undertaken by T.C.

Wakefield.—T.C. approved lay-out of 80 houses on Darnley estate. City Architect.

Walton and Weybridge.—Plans passed: T. H. Adamson & Sons, 7 shops and flats and 7 garages, Queen's-rd., Weybridge.

Warkworth.—Local golf club to extend club.

Whickham-on-Tyne.—U.D.C. declared Cook's-buildings, Brewery-bank, Hopper's-court, etc., at Swalwell, to be clearance area, and proposes to erect 37 houses.

Whitby.—North Riding County Architect, Northallerton, to prepare plans for school for 280 children.

Wigston.—U.D.C. recommend plans for 750 houses at South Wigston, by E. Hooley, Long Eaton.

Willington.—U.D.C. to ask M.H. for sanction to borrow £4,773 for 24 houses for aged people. J. H. Gardner, S.

Withington. — Commercial Estates, Ltd., 76, Mosley-st., Manchester, propose development of Durham House estate, Wilmslow-rd., for shops and houses.

Yiewsley and West Drayton.—U.D.C. approved: 16 houses Napier Development Co., West Drayton; hall for the Ivy Leaf Club, Ltd.

York.—E.C. propose electricity sub-stations at Nether Poppleton and The Groves.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time prices of materials should be confirmed by enquiry

[PRINCIPAL ALTERATIONS OF THE WEEK.—Turps. drops in price by 3d. per gallon.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames, up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
"Phorpres"	2 11 3	Flettons, B'ff'n'se Best Blue	3 6 3
Flettons at King's Cross	2 11 3	Pressed Staffs	9 5 0
Do., grooved for Plaster	2 13 3	Do. Bullnose	9 15 0
		Blue Wire Cuts	7 5 0

White Midhurst Facing Bricks (delivered London site) 5 0 0
"Phorpres" Whites (do.) 3 17 3
"Phorpres" Rustic Facing Bricks, delivered Central London ..... per 1,000 3 12 3
Best Stourbridge Fire Brick:—
2½ in. ..... 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretcher	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One side and two Ends	30 10 0
Headers	20 10 0	Two sides and one End	31 10 0
Quoins, Bull-nose and 4½ in. Flats	27 10 0	Splays and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

PARTITION SLABS.

Delivered London Area.

CLINKER CONCRETE.

2" per yd. sup.	1 6	3" per yd. sup.	2 0
2½" " "	1 8	4" " "	2 4

CRANHAM TERRA COTTA.

2" per yd. sup.	2 0	3" per yd. sup.	3 8
2½" " "	3 6	4" " "	4 7

HEMPSTEAD—KEYED TWO SIDES.

2" per yd. sup.	3 3	3" per yd. sup.	3 9
2½" " "	3 6	4" " "	4 3

	s. d.	
Thames Ballast	6 6 per yd.	delivered 2 miles radius Paddington.
Pit Ballast	5 6 " "	
Pit Sand	7 0 " "	
Washed Sand	7 6 " "	
¾ in. Shingle	6 6 " "	
¾ in. Broken Brick	10 6 " "	
Pan Breeze	7 6 " "	

CEMENT.

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test	
In Jute Sacks (11 to ton)	£2 4 9
In Paper Bags (20 to ton)	2 6 0

Colorcrete No. 1 & 2 Coloured Rapid Hardening Portland Cement in 1 cwt. paper bags free (non-returnable) 20/- per ton above Portland Cement Price.
"Snowcrete" White Portland Cement in 1 cwt. paper bags free (non-returnable) 190/- per ton.
Alongside Vauxhall in 80 Ton Lots.

Jute Sacks (11 to ton)	1 17 9
Paper bags (20 to ton)	1 19 0
Ferrocrete per ton extra on above	0 7 6
Vitrocrete per ton extra on above	0 7 6

NOTE.—Jute Sacks are charged 1s. 6d. each and credited 1s. 6d. each nett if returned in good condition within three months, carriage paid.

Super Cement (Waterproof) Paper Bags free	3 16 0
Roman Cement	6 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0

PLASTER.

Plaster, Coarse, Pink	3 0 0
" White	3 12 6
" Fine	4 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 5 0
Chalk Lime	2 5 0
Best Ground Blue Lias Lime	1 17 6
Hair .....per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 6d. each and credited 1s. 6d., if returned in good condition within three months carr. pd.
Stourbridge Fireclay in sacks 37s. 0d. per ton at rly.dep.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R, per ft. cube	2 10
BEER STONE—RANDOM BLOCK—	
Free on rail at Seaton Station, per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4½
Do. do. delivered on road waggons at above stations, per ft. cube	4 5½
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE—	
F.O.R. Quarries Wirksworth, Derbyshire, Random blocks from 10 ft. and over P.ft.cb.	s. d. 14 6
Sawn two sides	22 6
Sawn, three or four sides	25 6
CHILMARK—RANDOM BLOCK—	
At Nine Elms, per ft. cube	3 11
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super	5 6
6 in. rubbed two sides, ditto ..... "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1½ in. to 2 in. ditto ..... "	1 3½
HARD YORK—	
Delivered at any Goods Station, London.	
Scappled random blocks .....Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) .....Per ft. super	5 1½
6 in. rubbed two sides, ditto ... "	6 1½
4 in. sawn two sides slabs (random sizes) "	3 1½
3 in. ditto ditto "	2 8
2 in. self-faced random flags ...Per yd. super	8 0

CAST STONE.†

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills 10s. 0d.

SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 × 11	£23 10	3 × 6	£17 10
4 × 9	22 10	3 × 11	19 10
4 × 8	21 0	2 × 11	19 10
4 × 7	19 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19 10
3 × 7	18 0	3 × 4½	17 10
2½ × 7	18 0	3 × 4	17 10

PLANED BOARDS.

1 × 11	£22 10	1 × 9	£21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per s.
⅝	16/-	1¼	25/-
¾	17/-	1½	27/6
1	20/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	21/-
1¼	26/-
1½	27/6

MATCHING (BEST).

Inches.	per sq.
⅝	16/-
¾	18/6
1	22/6

	s. d.
ins BATTENS.	
⅝ × 2 ... per 100 ft.	2 6

SAWN LATHS.

	s. d.
Per bundle	2 3

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	3 0 0
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	29 15 0	18 by 10	15 12 6
22 by 12	25 0 0	18 by 9	13 15 0
22 by 11	22 10 0	16 by 10	13 10 0
20 by 12	22 0 0	16 by 8	10 7 6
20 by 10	19 7 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£4 7 0
ditto hand-made ditto	5 0 0
Ornamental ditto	5 8 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£11 0 0
Plain Compound Girders	12 0 0
" " Stanchions	15 0 0
In Roof Work	18 0 0

MILD STEEL ROUNDS.—To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	¾ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes and Tubulars Sizes ⅛in. to 6in. %	Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ⅛in. to 6in. %	Standard Fittings Sizes ⅛in. to 6in. %	Standard Flanges Sizes ⅛in. to 6in. %
Gas	65	52½	57½	70
Water	61½	48½	52½	65
Steam	57½	45	47½	60
Galv. gas	52½	40	47½	60
Galv. water	47½	35	42½	55
Galv. steam	42½	30	37½	50

C.I. HALF-ROUND GUTTERS—London Price ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop. Ends.
3 in.	11d.	1/5	5d.
3½ in.	11½d.	1/7	5d.
4 in.	1/0½	1/9	5d.
4½ in.	1/1½	2/-	6d.
5 in.	1/5	2/2	8d.

O.G. GUTTERS.

3 in.	1/1	1/11	5d.
3½ in.	1/2	1/11	5d.
4 in.	1/2½	2/-	5d.
4½ in.	1/4	2/4	6d.
5 in.	1/6½	2/8	8d.

RAIN WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles,	Branches, stock angles
2 in.	1/3½	1/9	2/7
2½ in.	1/4½	2/-	3/1
3 in.	1/8½	2/6	3/9
3½ in.	2/1½	3/-	4/4
4 in.	2/5	3/7	5/3

Connections—50 per cent. off above prices.
Tonnage allowance—4 ton lots, 5 per cent.
2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe,	Bends, stock angles,	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts.	2 0	1 6½	1 10½
2½ in. "	2 4	1 8½	2 4
3 in. "	2 6	1 10½	2 9½
3½ in. "	2 8	2 4	3 3
4 in. "	3 1	2 7½	3 9

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

	Pipe,	Bends, stock angles.	Branches. stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9 ft. lengths	3 10	4 3	7 0

	cwt.	qr.	lbs.				
4 in. "	1	1	20	5 2	5 0	8 9	
5 in. "	1	2	22	6 3	8 9	15 0	
6 in. "	2	0	6	7 3	10 3	18 0	

Gaskin for jointing 41/- per cwt.

Per ton in London.

	£ s. d.		£ s. d.
IRON—			
Common bars	10 0 0	to	10 10 0
Staffordshire Crown Bars—			
Good merchant quality	10 10 0	to	11 0 0
Staffordshire Marked Bars	14 0 0		15 0 0
Mild Steel Bars	9 0 0		10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 0 0		9 0 0
Hoop iron, basis price	11 0 0		12 0 0
" Galvanised	27 0 0		28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g	11 0 0		11 10 0
" " " 24 g.	12 0 0		13 0 0
" " " 26 g.	14 0 0		15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	13 0 0		14 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	14 0 0		15 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	17 0 0		18 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	13 0 0		14 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	14 10 0		15 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 0 0		17 0 0
Sheets, Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	16 10 0		17 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	18 10 0		20 10 0
Best Soft Steel Sheets, 26 g.	20 0 0		21 10 0
Cut Nails, 3 in. to 6 in.	15 0 0		16 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	0 9
Strong sheet	"	0 10
Thin	"	0 11
Copper nails	"	1 0
Copper wire	"	0 11

PLUMBERS' BRASS WORK.

Delivered in London

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
29/-	45/-	76/-	153/-	246/-	510/-	per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
41/6	62/-	92/-	174/-	300/-	588/-	per doz.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—*(contd.)*

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in.
30/- 60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

¾in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH GRASS CLEANING SCREW.

1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ..... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ..... 35/- 45/- 66/- 126/- ,,

TIN.—English Ingots, 2/1 per lb. SOLDER—Plumber. 11d., Tinmen's 1s., Blowpipe 1/1 per lb.

LEAD, &c.

(Delivered in London.)	£	s.	d
LEAD—Sheet, English, 4 lb. and up.....	22	0	0
Pipe in coils	19	0	0
Soil pipe	26	0	0
Compo pipe	26	10	0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 4s. per cwt. extra, and over 3 cwt. and under 5 cwt., 2s. 6d. per cwt. extra. Cut to sizes 4s. cwt. extra.

Old lead, ex London area, at Mills .....per ton £12 0 0

PAINTS, &c

	£	s.	d.
Raw Linseed Oil, in pipes .....per gallon	0	2	2
,, ,, ,, in barrels ..... ,,	0	2	4
,, ,, ,, in drums ..... ,,	0	2	7
Boiled ,, ,, in barrels ..... ,,,	0	2	7
,, ,, ,, in drums ..... ,,	0	2	10
Turpentine, in barrels ..... ,,	0	4	11
,, in drums (10 galls.) ,,	0	5	1
Genuine Ground English White Lead, per ton (In not less than 5-cwt. casks.)	46	0	0

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots per ton delivered 64 0 0

Red Lead, Dry (packages extra) ... per ton	34	0	0
Best Linseed Oil Putty .....per cwt.	0	13	6
Size, XD quality .....fkn.	0	3	0

VARNISHES, &c.

		Per gallon		
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Opal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	0
Fine Copal Flatting	ditto	1	0	0
Hard Drying Oak	ditto	0	18	6
Fine Hard Drying Oak	ditto	0	19	6
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	6
Best ditto	ditto	1	2	6
Best Japan Gold Size		0	12	0
Best Black Japan		0	10	0
Oak and Mahogany stain (water).....		0	12	6
Brunswick Black		0	7	0
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	6
Liquid Dryers in Terebene		0	9	0
Cuirass Black Enamel		0	7	0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per ft.		Per ft.
15 oz. fourths... 2½d.	32 oz. fourths.....	6d.
15 ,, thirds ... 2½d.	32 ,, thirds	8d.
21 ,, fourths ... 3½d.	Obscured Sheet,15 oz. ...	3d.
21 ,, thirds ... 3½d.	,, ,, 21 oz. ...	4½d.
26 ,, fourths ... 4d.	Fluted, 15 oz. 6½d., 21 oz.	9d.
26 ,, thirds ... 5½d.	Em'lld,15 oz. 4½d., 21 oz.	5½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES. Per ft.

Rolled plate ¼ in.....	4½d.
Rough rolled ¼ in.	5½d.
Rough rolled ½ in.....	5½d.
Figured, Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

"VITA" GLASS. Per foot.

	s.	d.
Clear sheet—not exceeding 1 foot	1	0
Do. do. 2 feet	1	3
Do. over 2 feet	1	9
Polished plate—not exceeding 1 foot	1	6
Do. not exceeding 2 feet	3	0
Cathedral—not exceeding 1 foot	1	0
Do. larger sizes	1	6
Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1	0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide	2	6

THE SCOTTISH BUILDER

HOUSING PROGRESS

THE following figures show the progress that has been made in State-aided housing schemes in Scotland to May 31, 1933 :—

	Completed.	Under construction.
1919 Act	25,129	—
Do. (by public utility societies)	421	—
Private subsidy schemes, 1919 (Additional Powers) Act	2,324	—
1923 Act :—		
By local authorities ...	4,015	—
By private enterprise ...	25,528	3,297
By public utility societies	80	—
1924 Act :—		
By local authorities ...	63,849	7,656
By private enterprise ...	4,529	3,175
By public utility societies	143	—
Slum Clearance :—		
(1) 1923 Act	15,723	952
(2) 1930 Act	6,624	7,923
Not yet allocated between 1924 and 1930 Acts ...	60	174
1931 Act :—		
By local authorities ...	10	328
Demonstration houses ...	17	—
Steel houses erected on behalf of Government by Scottish National Housing Company	2,551	—
	151,003	23,505

NEW BUILDINGS

Airdrie. — BUILDING. — The Dean of Guild Court has granted warrant to Mr. A. Revie for eleven five-apartment houses in George-street, and to the Lanark C.C. for new public assistance offices in Hallcraig-street. Application was also made by the County Council for leave to build a new R.C. school at St. Margaret's, Hallcraig-street.

Bonnybridge.—HOUSES.—Plans are in hand for 20 houses at Seabegs. Messrs. Thomas Copland and Blakey, architects, 76, High-street, Falkirk.

Dundee.—HOUSING. — Extensive housing development on the Camperdown estate, adjoining the Downfield golf course, was foreshadowed at a meeting of the Housing Committee of the Town Council. It was proposed that the Corporation should purchase 188 acres of land at a price of £13,500.

Dunfermline.—HOUSES.—Mr. D. H. Shaw, Burgh Engineer, has prepared plans for 44 houses at Bellycoman, for the T.C. Tenders are invited.

Edinburgh.—ADDITIONS.—Plans are in hand for reconstruction and additions to properties at Crawford-road; new garages, reconstruction and additions for the cemetery at Bedford-road. Messrs. Dick, Peddie and Walker Todd, architects, Queen-street.

Glasgow.—ALTERATIONS. — Tenders are being invited by the T.C. for alterations and additions to Maryhill police station.

Glasgow.—EXTENSIONS.—Plans are in hand for a new scheme of reconstruction and extension to parish church of Scotland at Lint-house. Messrs. Keppie and Henderson, architects, 181, West Regent-street, Glasgow, W.C.2.—Plans are also in hand for reconstruction and extension scheme at Victoria-drive and Coplaw-street for the Air Force headquarters. Mr. Launcelot Ross, architect, 223, West George-street, Blytheswood, Glasgow.

Glasgow.—EXTENSIONS.—The T.C. are inviting tenders for extensions to St. Charles's school, Kelvinside-gardens, N.W.

Inverness.—ADDITIONS.—Mr. R. Robertson, County Surveyor, 26, Bank-street, has prepared plans and the County Council are now inviting tenders for alterations and additions to Beauly and Eriskay public schools, South Uist.

Inverness.—HOUSES.—The T.C. are to proceed with a further development of houses.

Largs.—ADDITIONS.—Plans are in hand for a reconstruction and additions scheme at the County Branch of the Cripple Children's League at East Park House. Mr. J. Fairweather, architect, 180, Trongate, Glasgow.

Largs.—BUNGALOWS.—Plans were passed at the Dean of Guild Court for the erection of 21 bungalows at £12,600.

Leith.—SHOPS.—Plans are in hand for several shops and houses at Boswall Parkway, for the Leith Provident Co-operative Society, Ltd., Bangor-road. Messrs. W. Thomson and Co., architects, 87, Constitution-street, Leith.

Oban.—GRANDSTAND. — Plans have been passed at Oban Dean of Guild Court for the erection of a covered grandstand at the municipal sports ground at Mossfield.

Paisley.—EXTENSION.—The Paisley Free Library and Museum Committee has decided to proceed with the extension of the library in High-street. The estimated cost of the extension is £4,000.

Paisley.—HOUSING.—The Dean of Guild Court has approved of plans presented by the Town Council for the formation of new streets and the erection of 38 blocks of dwelling-houses at Gallowhill.—The other linings passed by the Court included :—United Thread Mills, Ltd., 155, St. Vincent-street, Glasgow—to erect additions to the printing department at the Anchor Thread Works.

Rothesay. — HOUSING. — Plans have been passed by the Rothesay Dean of Guild Court for the Corporation housing scheme, which provides for 40 houses of three apartments each, at an estimated cost of £14,000.

Stirlingshire.—CHURCH.—Plans are in hand for new church, costing £8,000 to £10,000, at Cowie. Messrs. Gillespie, Kidd and Cork, architects, 144, St. Vincent-street, Glasgow.

BUILDING TRADE WAGES IN SCOTLAND*

Following are grade rates authorised by the Scottish N.J.C. for Building Industry. The bricklayers in the Glasgow district have ½d. per hour extra. Painters, by ruling of the Scottish National Painters' and Decorators' Joint Council, have from January 1 new rates. Grade A towns, 1/6 per hour; Grade B, 1/5; Grade C, 1/4; Aberdeen has a special rate of 1/5½. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classifications ...	A	A¹	A²	A³	B	B¹	B²	B³
Craftsmen	1/6	1/6	1/5½	1/5	1/4½	1/4	1/3½	1/3
Labourers	1/2	1/1½	1/1½	1/0½	1/0½	1/-	/11½	/11½

Aberdeen	A	Dundee	A	Hawick	A²	Perth	A
Airdrie	A	Dunfermline	A	Helensburgh	A	Perthshire	A
Alexandria	A	Dunoon	A	Inverness	B	Peterhead	A
Arbroath	A²	East Lothian	A	Kilmarnock	A	Renfrewshire	A
Ayrshire	A	Edinburgh	A	Kincardineshire	A²	Rothesay	A
Bathgate	A	Falkirk	A	Kinross-shire	A	Roxburghshire	A²
Bo'ness	A	Forfarshire	A²	Kirkcaldy	A	St. Andrews	A
Broughty Ferry	A	Fort William	A	Lanarkshire	A	Selkirkshire	A
Clackmannanshire	A	Galashiels	A²	Leith	A	Stirling	A
Coatbridge	A	Glasgow	A	Midlothian	A	Stirlingshire, West	A²
Dumbartonshire	A	Greenock	A	Motherwell	A	West Lothian	A
Dumfries	A²	Hamilton	A	Peebleshire	A²	Wishaw	A
Dumfriesshire	A²						

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 1060.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	8	9
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	3
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundations 1 to 6	per yard cube	24	3
Add if in underpinning in short lengths	" "	5	6
Add if in floors 6 in. thick	" "	2	3
Add if in beams	" "	2	9
Add if aggregate 1 : 2 : 4	" "	9	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	27	0	0
Add if in stocks	"	7	0	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	0	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	0	11
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	0

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	9
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	17	6
Chilmark stone fixed complete	" "	16	6

SLATER.

		s.	d.
Welsh 16in. × 8 in. 3 in. lap. including nails	per square	72	9
Do. 20 in × 10 in. Do. Do.	"	80	9
Do. 24in. × 12in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	4	0
Do. joists	" "	4	6
Do. roofs, floors and partitions	" "	5	0
Do. trusses	" "	7	3

	¾"	1"	1¼"	2"
Deal rough close boarding per sq.	30/-	35/-	43/-	70/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	9
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.	¾"	1"	1¼"	1½"
Deal-edges shot per sq.	—	38/-	45/-	52/-
Do. tongued and grooved "	—	43/-	50/-	58/-
Do. matchings "	40/-	45/-	—	—
Moulded skirtings, including backings and grounds per ft. sup.	1/4	1/7	1/9	2/3

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights, average size		3	6

DOORS.	1½"	1¾"	2"
Two-panel square framed per ft. sup.	2/1	2/3	2/5
Four-panel Do. "	2/4	2/6	2/9
Two-panel moulded both sides "	2/6	2/9	2/11
Four-panel Do. Do. "	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	12	6

	1"	1¼"	1½"
Plain deal jamb linings framed per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers "	1/2	1/4	1/7
Add if cross-tongued "	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1¼ in.	per ft. run	0	9
Mahogany handrail, average 3 in. x 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	0
Plain compound girders	"	18	0
Do. stanchions	"	20	9
In roofwork	"	26	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/-	1/1	1/3	1/6
Ogee Do. Do.	"	1/2	1/3	1/9	2/3
Rain-water pipes with ears	"	1/3	1/10	—	—
Extra for shoes and bends	each	2/9	3/11	—	—
Do. stopped ends	"	1/1	1/4	1/9	2/6
Do. nozzles for inlets	"	2/2	2/7	3/7	4/-

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	38	0
Do. do. flats	"	37	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

	½"	¾"	1"	1½"	2"	4"
Drawn lead waste perft. run	11½	1/4	1/6½	2/5	2/8	—
Do. service "	1/3	1/9	2/-	3/-	—	—
Do. soil "	—	—	—	—	—	5/9
Bends in lead pipe each	—	—	—	—	2/6	6/-
Soldered stop ends "	0/9	1/1	1/6	2/3	2/10	—
Red lead joints "	0/10	0/11	1/2	1/9	2/1	4/3
Wiped soldered joints "	2/3	2/9	3/0	3/10	4/10	6/9
Lead traps and cleaning screws "	—	—	—	10/6	14/-	—
Bib cocks and joints "	6/4	9/7	14/-	—	—	—
Stop cocks and joints "	12/4	14/2	20/8	54/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	0
Do. Do. Sirapite	" "	2	3
Do. Do. Keen's	" "	3	0
Add saw lathing	" "	1	4
Add metal lathing	" "	2	4
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1
One-and-a-half granolithic pavings	per yard sup.	5	3½

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	6½
26-oz. Do.	" "	0	7¾
Obscured sheet	" "	0	8
¼-in. rolled plate	"	0	9
¼-in. rough rolled or cast plate	" "	0	10
¼-in. wired cast plate	" "	1	1

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

Change of Address.

Messrs. G. E. Wallis and Sons, Ltd., builders, contractors and decorators, have removed to a new London address, 18-20, York-buildings, Adelphi, London, W.C.2. Tel. No. : Temple Bar 8112.

Maiden Erlegh Sale.

As the result of the auction of building land, forming part of the Maiden Erlegh estate, held at Reading on June 12, by Messrs. Knight, Frank and Rutley, in conjunction with Messrs. Simmons and Sons, nine of the 18 lots offered were sold, comprising an area of 23 acres. Land fronting the Wokingham-road was sold at between £600 to £700 an acre.

A Builders' Merchant's Business.

Messrs. Edward Marshall, Ltd., have started business as builders' merchants and sanitary specialists at 3/4, University-street, Tottenham Court-road, London, W.C.1 (Museum 2607), with warehouses in Mortimer-street, at the rear of the premises. The directors are Mr. H. M. Cohen, formerly with Messrs. Rownson, Drew and Clydesdale, Ltd., and Mr. K. J. M. Worley.

Commercial Vehicles.

Readers interested in transport will have an opportunity of seeing the very latest motor vehicles at the Royal Agricultural Show, July 4 to 8. Messrs. Morris-Commercial Cars, Ltd., of Adderley Park, Birmingham, have taken a large stand and are exhibiting a full range of new vehicles they have just introduced, these being of special interest in view of the many advanced chassis features embodied. The Morris-Commercial exhibits include a 30-cwt. forward-control lorry with four-cylinder engine, a six-cylinder 2-ton end-tipper, a 3-ton forward-control six-cylinder lorry, a 70-cwt. "Leader" lorry, a 1-ton van and an ambulance.

Accident Prevention.

With the object of disseminating information on the circumstances under which accidents occur and of means of prevention, the Chief Inspector of Factories has arranged to collect information concerning reported accidents which are likely to be of general interest to employers, workers and others interested in accident prevention, and to issue short descriptions of these accidents (with illustrations where desirable) in booklet form quarterly by H.M. Stationery Office, Kingsway, W.C., and the first number will be published on July 1. The price is 1s. 4d. a year, post free.

"Motor Coach Stations."

Under this title, the British Steelwork Association, Artillery House, S.W.1, has published another of its excellent brochures on the use of steel in modern construction. The considerable development of express road passenger transport makes this particular issue a timely one, as motor-coach stations, where the public can wait under shelter, are an essential to the development of any successful service. A useful preface, which draws attention to some of the points to be kept in mind when planning a station, is followed by illustrations of several good examples of such buildings, among them the Victoria Coach Station (Messrs. Wallis, Gilbert and Partners). King's Cross Coach Station (Messrs. Trehearne and Norman, Preston and Co.), the Belfast (Smithfield) Bus Station. and stations at Poland-street, W., Bournemouth, and Kennington. Steel construction with large spans is an obvious form for such buildings, and assistance or advice will gladly be given by the British Steelwork Association (which is a non-profit-earning body) to architects or others interested.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Altrincham.—12 type "A" houses in Oakfield-road, for the U.D.C. Mr. H. E. Brown, surveyor :—

*R. B. Key, Woodley, near Hyde.

Altrincham. — Rebuilding the Borough-road Methodist Church and school, for the Methodist Authorities. Messrs. A. Brocklehurst & Co., F.R.I.B.A., architects, Norfolk-street, Manchester :—

Builders—*W. Thorpe & Son, Ltd.
Slating—*F. Brown & Son, Ltd.
Plumbing—*J. A. McCrea & Sons, Ltd.
Plastering and painting—*J. Ferguson & Co.
(All of Manchester.)

Ayegarth.—Installation of heating apparatus at the Preparatory School :—

*W. Richardson and Co., Ltd., Darlington.

Ballinakill.—13 labourers' cottages, for the Leix C.C. :—

*D. Kirwan, Raheenabrogue.

Barkingside.—Rebuilding of the "Old Maypole" public-house, for Messrs. Ind Coope and Co., Ltd., brewers, Burton-on-Trent and Romford. Mr. J. W. Hammond, F.I.A.A., architect, 40, High-street, Romford :—

C. J. Smith	£19,286 3 0
W. Ford and Sons	19,178 17 0
E. R. Hipperson and Son	18,700 0 0
H. E. Jerram	18,700 0 0
Patman and Fotheringham	18,613 0 0
Y. J. Lovell and Son	18,428 0 0
E. A. Roome and Co., Ltd.	18,223 0 0
A. E. Symes, Ltd.	18,048 0 0
Allen Fairhead and Sons	18,000 0 0
R. Ginn and Son	17,999 0 0
Geo. Barker	17,966 0 0
*Baker, Hammond and Laver, Rainham	17,865 0 0

Bedford.—For sanitary arrangements at (a) Clapham-road, and (b) Queen's Park Council schools, for the T.C. Mr. G. P. Allen, architect :—

*R. Jeakings (Clapham-road)	£1,389
*R. Jeakings (Queen's Park)	968

Blackhill.—Sports pavilion at Hamsterley Colliery. Mr. E. Graham, welfare supervisor, Coal Trade Office, Neville Hall. Newcastle-on-Tyne :—

*Gallagher, Blackhill.

Bootle.—63 houses in Aintree-road and Southport-road. Messrs. Williams & Kelly, architects, Law Association-buildings, 13, Harrington-road, Liverpool :—

*E. Spencer, Liverpool.

Bradford.—Warehouse in Longford-street, for the Provident Clothing and Supply Co., Ltd., Colonnade, Westgate. Messrs. Samuel Robinson & Sons, architects, 15, Cheapside :—

*T. Obank & Sons, Bradford.

Bramley.—The following works contract has been placed by the War Office during the week ended June 22 :—

Ordnance Depot, additional buildings at school of instruction, H. W. Fisk, Godalming.

Cardiff.—New Leckwith Bridge and approaches, for the T.C. and Glamorgan C.C.

*North Western Construction Co., Liverpool £14,685 0 0

Chester.—Painting work required to the houses on the Eaton-road estate, for the T.C. :—

*G. Perkins, 30, Christleon-road, Chester £332

Cholsey.—12 houses at Cholsey for the Wallingford R.D.C. Mr. T. H. Floyd, F.R.I.B.A., architect, St. Nicholas House, West Mills, Newbury :—

*Universal Housing Co., Ltd., Rickmansworth.

Chorley.—Swimming bath, cafe and restaurant at Hartwood Hall, Preston-road, for the Hartwood Swimming Pools, Ltd. Mr. W. Draper, architect, Hartwood Hall :—

*L. Fairclough, Ltd., Adlington, near Chorley.

Biggleswade.—Houses, for the R.D.C. Clerk :—

	18 *houses and roads, Northill.*	6 *houses, Campton.*	6 *houses, M'hanger.*	6 *houses, Potton.*	6 *houses, Meppershall.*
Bartle & Sons, Potton	—	—	—	£1,770 0 0	—
Beaumont & Taylor, Henlow	£5,494 15 0	£1,793 8 0	£1,737 0 0	—	£1,793 8 0
E. Battson, Biggleswade	—	—	2,195 0 0	—	—
Bennett Bros., Letchworth	5,242 0 0	1,728 0 0	1,824 0 0	1,710 0 0	1,682 0 0
A. T. Bottoms, Silsoe	—	1,962 10 0	—	—	—
A. E. Guest, Ltd., London	5,148 4 9	1,716 11 10	1,708 2 0	*1,624 5 6	1,753 3 10
Frank Hendry, Sandy	—	—	1,895 0 0	1,865 0 0	—
Harry Hendry & Son, Sandy	—	—	1,966 0 0	—	—
C. Hutchinson, Potton	—	—	—	1,758 0 0	—
T. V. Judge & Sons, Ltd., Henlow	5,714 0 0	1,824 0 0	1,905 0 0	1,765 0 0	1,810 0 0
Seymour Bros. & Tookey, Stotfold	*5,006 0 0	*1,635 0 0	*1,620 0 0	*1,646 0 0	*1,631 0 0
C. Smith, Eaton Socon	—	—	1,990 7 0	1,974 16 0	—
G. Styles & Son, Biggleswade	6,285 0 0	2,043 0 0	2,093 0 0	1,973 0 0	—
Townsend Bros. & Watts, St. Neots	—	—	1,850 0 0	—	—
R. & H. Wale, Gamlingay	—	—	1,800 0 0	1,730 0 0	—

Connah's Quay.—18 houses in Primrose-street, for the U.D.C. Mr. S. H. Garratt, architect, 68, Chester-road, Shotton, near Chester :—

*T. Roberts, Ltd., Mold £5,220

Consett.—60 houses on the Consett Park farm, for the U.D.C. Mr. J. J. Eltringham, architect, Blackhill :—

*J. H. Ayton, 5, George-street, Blackhill.

Cosham.—Public convenience at the junction of London-road and Northern-road, Cosham, for the T.C. City Engineer :—

*Cortis & Hankins, Drayton, Portsmouth	£1,627 19 6
John Lay & Co. (Portsmouth) Ltd.	1,646 0 0
A. H. Clear & Sons, Purbrook, Portsmouth	1,676 3 11
E. & A. Sprigings, Portsmouth	1,678 0 0
Howe & Bishop, Portsmouth	1,697 0 0
Green & Foley, Portsmouth	1,680 6 2
Samuel Salter (Portsmouth), Ltd.	1,752 0 0
A. E. Porter & Sons, Ltd., Portsmouth	1,767 0 0
John Hunt, Ltd., Gosport, Hants	1,800 0 0
James Drewitt & Sons, Bournemouth	1,825 0 0
Henry J. Phillips, Southsea	1,907 7 2

Derby.—Tenements in Exeter-street, for the T.C. Mr. C. H. Aslin, F.R.I.B.A., Borough Architect, Gower-street :—

*E. Morley & Son (Derby), Ltd., Derby £12,675

Doncaster.—Extensions at Stanley House, for the P.A.C. Mr. F. O. Kirby, Borough Engineer, Priory-place :—

*H. Westmoreland, Doncaster £1,069

Dublin.—Stores and warehouse at Bull-lane, for Messrs. Coleman. Messrs. Bergin & Butler, architects :—

*P. F. Fearon, Ranelagh.

Dunmow.—Ten houses at Thaxted, for the R.D.C.

*Ratcliffe, Thaxted £2,967 0 0

Ewell.—Making-up of footpaths in Briarwood-road, Kenilworth-road and part of Broadway, Stoneleigh Park estate. Messrs. Atkinson & Marler, surveyors, London-road, Ewell. Mr. E. Russell, P.A.S.I., quantity surveyor :—

Bridgwater Bros.	£2,109 0 0
J. Cronk & Sons	2,010 10 6
G. Wimpey & Co.	1,990 18 6
*Willment Bros.	1,751 0 0

Forehoe.—Two pairs of houses at Wicklewood, and one pair at Hingham, for R.D.C. :—

*H. Bidewell, Wymondham (Wicklewood).
*H. C. Toft & Son, Hingham (Hingham).

Glasgow.—Reconstruction and additional story on the Renfield-street Buildings. Mr. James Taylor, architect and surveyor, 220, West Regent-street, W.C.2 :—

*Duncan Chalmers & McGill, Ltd., 76, William-street, Anderslow, Glasgow.

Glasgow.—Reconstruction and extension to Unionist Club, Pollokshaws. Messrs. MacWhannell & Reid, architects, 233, West Regent-street, W.C.2.—

Excavation, brick and mason—*R. London & Co., Ltd., 60, King-street, Pollokshaws, Glasgow.

Grangemouth.—For work at Reservoir. Messrs. Warren & Stewart, architects & engineers, 94, Hope-street :—

*J. J. & P. McLachlan, Muirhall-road, Larbert (about £21,300).

Grimsby.—Sub-stations in Scartho-road and Laceby-road, for the T.C. :—

*A. C. S. Emerson £609

Harrogate.—New Church of St. Wilfrid. Mr. L. Moore, architect :—

*Wm. Nicholson & Sons (Leeds), Ltd.

Hull.—Offices in The Avenue, High-street, for Messrs. Spillers, Ltd. Messrs. Gelder & Kitchen, architects, 120, Alfred Gelder-street :—

*Quibell & Son, Ltd., Hull.

Hull.—New Talbot Hotel in Spring Bank West, for Messrs. Bass, Ratcliff & Gretton, Ltd., brewers, Burton-on-Trent. Messrs. Wheatley & Houldsworth, architects, Saville House, Saville-street, Hull :—

Fenner, Panton & Co., Ltd., Hull.
(Estimated cost, £10,000.)

Hunslet.—Alterations and additions at "The Anchor Hotel," Balm-road, for Messrs. Joshua Tetley & Sons, Ltd., The Brewery, Leeds. Messrs. Kitson, Parish, Ledgard & Pyman, architects, Lloyd's Bank-chambers, Vicar-lane, Leeds :—

*Holroyd, Brook & Eagland, Ltd.

Jarrow-on-Tyne.—108 houses, for the T.C.
Direct Labour £32,253 0 0

Kearsley.—24 non-parlour type houses, on the Springfield-road estate, for the U.D.C. Mr. E. Shaw, surveyor:—
*G. & J. Seddon, Ltd., Little Hulton, near Bolton.

Kendal.—Vestries and alterations to the Parish Church, for Vicar and Church Wardens. Messrs. John F. Curwen & Son, F.R.I.B.A., architects, 24, Highgate:—
*G. F. Martindale & Sons, Kendal.

Kinross.—Reconstruction and additions at three farm houses. Messrs. Robert Walker, Hardie & Smith, architects, 109, Douglas-street, Glasgow:—
*Ireland & Stewart, Kinross.

Lancashire.—Providing and laying of asphalt surfacing on Liverpool-East Lancashire-road, Liverpool, to Salford, for the C.C. Mr. Peter Schofield, County Surveyor, County Offices, Preston:—

Section 1 and 2—
*Neuchatel Asphalte Co., Ltd.

Section 3—
*Wirksworth Quarries, Ltd., Wirksworth.

Section 4—
*G. Wimpey & Co., Ltd.

Section 4a—
*Unaphalt Roads, Ltd.

(Remainder of London.)
(Estimated cost, £200,000.)

Lancaster.—Detached bungalow at Hest Bank, for Mr. R. W. Scaife. Messrs. Charles B. Pearson & C. E. Pearson, F. & A.R.I.B.A., architects, 18, Dalton-square:—
*Thompson & Morris, Lancaster.

Leeds.—Block of houses and shops fronting Beeston-road:—
*J. E. Brown.

Leeds.—New Primitive Methodist chapel on the Wykebeck housing estate. Messrs. Kirk & Tomlinson, architects, Albion-street:—
*Dunhill Bros., York-road, Leeds, 9.

Brickwork—
*P. Rhodes, Ltd., Leeds.

Liverpool.—Extensions to the Brunswick Wesleyan Chapel, Moss-street, for the Rev. W. Medcalfe, 20, Rufford-road, Fairfield. Messrs. A. Brocklehurst & Co., F.R.I.B.A., architects, Martins Bank-chambers, Norfolk-street, Manchester:—
*Cartwright Bros. (Little Sutton), Ltd., Birkenhead.

Liverpool.—Extensions to works of Messrs. A. W. Duncan & Co., Ltd., Concert-street. Messrs. S. B. Howard and Stewart McLauchlan, architects, Royal Liver-buildings:—
Builders—*W. A. Barnes.
Steelwork—*T. James & Co.
(Both of Liverpool.)

London.—Tenders accepted by H.M. Air Ministry for the week ended June 17:—
District heating scheme (Henlow)—Comyn Ching & Co., Ltd., 54, Castle-street, W.C.2.
Heating extensions to hospital (Halton)—Wm. Freer, Ltd., 49, Red Lion-street, W.C.1.
Married quarters (Biggin Hill)—E. J. Logan, 212a, Shaftesbury-avenue, W.C.2.

London.—Tenders accepted by H.M.O.W. for the week ended June 22:—
Government offices, Southern Block, Whitehall—Internal painting and cleaning—Boyce & Co., 1, Barford-close, Hendon, N.W.4.
Post Office Stores, Fordrough-lane, Birmingham—Wood-block flooring—R. W. Brooke & Co., Ltd., 36, Dale-street, Liverpool.
Imperial College of Science, South Kensington—Installation of new steam and condense mains—Brightside Foundry and Engineering Co., Ltd., Chicheley-street, Belvedere-road, S.E.1.
West Hartlepool Post Office—Improvements and alterations—E. M. Tweddle, Ltd., Osborne-road, W. Hartlepool.

London.—Works at the Metropolitan Cattle Market, for the City Corporation:—

Pointing—boundary walls—	
W. Silk & Son, Ltd.	£229 0
Permanens, Ltd.	207 0
Lister & Co. (Builders), Ltd.	173 0
*N. Lidstone & Son	159 0
External painting generally—	
Rice & Son, Ltd.	£589 0
A. Roberts & Co., Ltd.	537 0
W. G. Beaumont & Son	525 0
*Permanens, Ltd.	487 10
Clock tower and bank buildings—internal painting and repairs—	
W. G. Beaumont & Son	£545 0
Rice & Son, Ltd.	410 0
Courtney & Fairbairn, Ltd.	405 0
*A. Roberts & Co., Ltd.	376 0

London.—External painting and decoration at Hercules-road and Avondale House dwellings and 471 to 487, Old Kent-road, for the City Corporation:—

	Hercules rd.	Avondale House.	Old Kent rd.
W. H. Wagstaff & Sons	£575 0	£475 0	£178 0
Holland & Hannen & Cubitts, Ltd.	446 0	408 15	194 0
F. J. Howard	366 7	402 3	105 3
*Falkus Bros., Ltd.	345 10	343 10	104 10

London.—Installation of heating and hot-water supply systems, gas services, etc., in the new reception block, out-patients' department, etc., at St. Giles' hospital, for the L.C.C.:—

James Combe & Son, Ltd.	£1,404
Saunders & Taylor, Ltd.	1,339
Clark, Hunt & Co., Ltd.	1,317
The Brightside Foundry & Engineering Co., Ltd.	1,309
William Freer, Ltd.	1,300
H. C. Goodman, Reading	1,294
The Fretwell Heating Co., Ltd.	1,275
Cannon and Hefford	1,255
Benham & Sons, Ltd.	1,235
G. N. Haden & Sons, Ltd.	1,211
*Norris Warming Co., Ltd., 11-12, St. Andrew's-hill, E.C.	1,203

(Chief Engineer's estimate, £1,300.)
(Remainder of London.)

London.—Cleaning, painting and repairs at Park hospital, for the L.C.C.:—

J. Scott Fenn, Ltd.	£4,668 0
Walker (Tooting), Ltd.	3,985 0
Boyce & Co.	3,896 0
Arthur H. Inns, Ltd.	3,827 0
Edward Proctor & Sons	3,680 0
W. Bickerton	3,314 10
*Sykes & Son, Ltd., 10, Essex-street, Strand, W.C.2	3,090 0
J. T. High & Co.,	2,894 0
Lilly & Sons, Ltd.	2,733 0

(Chief Engineer's estimate, £3,630.)
(All of London.)

London.—New operating theatre, X-ray department, etc., at St. Mary, Islington, hospital, for the L.C.C.:—

		(Empire Materials.)
W. M. Brand	£8,288	No variation.
John Garrett & Son, Ltd	7,624	do.
Allen Fairhead & Sons, Ltd.	7,547	do.
C. Miskin & Sons, Ltd.	7,459	do.
W. H. Lorden & Son	7,375	do.
Chessums, Ltd	7,346	£7,379
E. D. Winn & Co., Ltd.	7,344	No variation.
F. Troy & Co., Ltd.	7,339	do.
Patman & Fotheringham, Ltd.	7,322	do.
Killby & Gayford, Ltd.	7,290	do.
George Keetch & Sons, Ltd.	7,250	do.
L. H. & R. Roberts	7,111	do.
Triggs & Co., Ltd.	6,984	do.
C. P. Roberts & Co., Ltd.	6,958	do.
Mullen & Lumsden, Ltd.	6,926	do.
Rowley Bros., Ltd.	6,700	do.
*The Ashford Builders' Co., 3, Bloomsbury-place, W.C.1	6,589	do.
Architects estimate		£6,811

(All of London.)

London.—Enlargement of the Wandle sewer in Garratt-lane from Mapleton-road to low level sewer No. 2, for the L.C.C.:—

Messrs. Kinnear, Moodie & Co.	£14,989 15 9
John Cochrane & Sons, Ltd., S.W.1	14,485 12 2
Edmund Nuttall, Sons & Co., and John Mowlem & Co. (Joint), Ltd., S.W.1	13,064 0 2
Charles Brand & Son	12,543 12 6
Mitchell Brothers, Sons & Co., Ltd.	12,536 7 2
Howard Farrow, Ltd.	11,923 9 10
Metropolitan Construction Co., Ltd.	11,592 12 4
Walter Scott & Middleton, Ltd.	11,410 5 8
W. & C. French, Ltd., Buckhurst-hill	10,555 3 11
*D. G. Somerville & Co., Ltd., 35, Grosvenor-place, S.W.1	9,753 6 8

(Chief Engineer's Estimate, £12,926 1s. 9d.)
(Remainder of London.)

London.—Cable tunnel in Great College-street, for the St. Pancras B.C.:—

Mitchell Bros., Sons & Co., Ltd.	£2,159 5 3
H. Fairweather & Co.	1,350 0 0
G. Bell & Sons, Ltd.	1,224 17 2
Holloway Bros. (London), Ltd.	1,102 0 0
*O. C. Summers, 111-113, York-road, N.W.	1,075 15 11

London.—Switch-house in Pratt-street, for the St. Pancras B.C. Chief Electrical Engineer and Manager:—

Holloway Bros. (London), Ltd.	£3,455 0 0
Sir W. Prescott & Sons, Ltd.	3,450 0 0
Sims & Sims	3,375 0 0
H. Fairweather & Co.	3,300 0 0
Callow & Wright, Ltd.	3,291 0 0
F. J. & F. G. Coxhead	3,212 0 0
Fairweather & Ranger	3,209 10 0
W. H. Wagstaff & Sons	3,194 0 0
R. Woollaston & Co.	3,154 0 0
F. E. Little	3,151 0 0
E. H. Norris	3,132 0 0
G. Keetch & Sons, Ltd.	3,106 0 0
Galbraith Bros., Ltd.	3,095 0 0
Spiers, Ltd.	3,000 0 0
Chessums, Ltd.	2,930 0 0
*W. Rands, 81, Fortess-road, Kentish Town, N.W.	2,823 2 6

London.—Painting all external iron and metal work, washing down external glazed bricks and oiling teak woodwork at Marshall-street baths, for the Westminster City Council:—

Hampton & Sons, Ltd.	£454
R. M. Pearson	345
F. C. Hoskins & Co., Ltd.	341
Sims & Russell	333
Hutchings & Keasley, Ltd.	299
Lapthorne & Co., Ltd.	275
*Walter Lilly & Co., Orchard Works, St. Ann's-street, S.W.1	249

London.—Cleaning, painting and repair works, at hospitals, for the L.C.C.:—

Hammersmith hospital—

John Marsland & Sons, Ltd.	£2,750
White & Johnson, Ltd.	2,630
W. J. Marston & Son	2,589
A. & F. Polden, Ltd.	2,551
R. Hewett, Ltd.	2,550
C. & T. Painters, Ltd.	2,211
Decra, Ltd.	2,137
Charles Berger & Son	2,120
*Geo. Jones & Son, 27b, Church-street, Kensington, W.8.	1,897

(Chief Engineer's estimate, £2,580.)

Paddington hospital—

W. S. Barton & Co.	£3,875
Bovis, Ltd.	3,347
Cole, Lonsby & Co., Ltd.	3,170
W. Chappell & Co., Ltd.	2,850
Falkus (Public Works), Ltd.	2,764
C. H. Boyd & Son, Ltd.	2,708
C. & T. Painters, Ltd.	2,654
Chas. Berger & Son	2,535
Sykes & Son, Ltd.	2,447
*H. Lawrence & Sons, 50, Brighton-road, Coulsdon	2,260

(Chief Engineer's estimate, £2,711.)

St. Mary, Islington, hospital—

Chessums, Ltd.	£2,889
Patman & Fotheringham, Ltd.	2,722
Stevens & Sons	2,450
G. Godson & Sons, Ltd.	2,415
Whitby's, Ltd.	2,400
Falkus (Public Works), Ltd.	2,185
H. Lawrence & Sons	2,171
Edward Proctor & Sons	2,135
*Sykes & Son, Ltd., 10, Essex-street, Strand, W.C.2.	1,939

(Chief Engineer's estimate, £1,955.)

Highgate hospital—

Patman & Fotheringham, Ltd.	£1,762
Stevens & Sons	1,750
F. Cottrell, Ltd.	1,670
Lilly & Sons, Ltd.	1,597
Joseph Darch, Ltd.	1,486
Sykes & Son, Ltd.	1,357
G. Godson & Sons, Ltd.	1,255
Falkus (Public Works), Ltd.	1,108
*Edward Proctor & Sons, Rockmount-road, Plumstead, S.E.18	1,104

(Chief Engineer's estimate, £1,115.)

Eastern hospital, Homerton—

George Keetch & Sons, Ltd.	£3,447
W. M. Brand	3,150
Barrett & Power	2,988
Patman & Fotheringham, Ltd.	2,971
Sykes & Son, Ltd.	2,811
W. Silk & Son, Ltd.	2,793
Edward Proctor & Sons	2,700
Falkus (Public Works), Ltd.	2,698
Chas. Berger	2,590
H. Lawrence & Sons, 50, Brighton-road, Coulsdon	2,550

(Chief Engineer's estimate, £2,927.)

Northern hospital, Winchmore Hill—

Stevens & Sons	£2,350
Albert Monk	2,200
Edward Proctor & Sons	1,980
C. P. Roberts & Co., Ltd.	1,908
H. Lawrence & Sons	1,892
Whitbys, Ltd.	1,840
C. Tavener & Son	1,775
John Mowlem & Co., Ltd.	1,770
F. Troy & Co., Ltd.	1,715
*Sykes & Son, Ltd., 10, Essex Street, W.C.2.	1,570

(Chief Engineer's Estimate, £1,585.)

Southern hospital, Dartford—

John Wright & Son (Blackwall), Ltd.	£3,650
W. F. Blay, Ltd.	3,200
H. Lawrence & Sons	3,089
Thomas & Edge, Ltd.	2,929
Edward Proctor & Sons	2,900
William Mills & Sons (Builders and Contractors), Ltd.	2,881
Andrew Black & Son	2,718
J. Scott Fenn, Ltd.	2,675
C. & T. Painters, Ltd.	2,524
J. & C. Bowyer, Ltd.	2,500
*Falkus (Public Works), Ltd., 46, Bishopsgate E.C.2.	2,222

(Chief Engineer's estimate, £2,800.)

St. Charles' hospital, Ladbroke-grove—

Burnand & Pickett, Ltd.	£3,296
Sykes & Son, Ltd.	3,000
Decra, Ltd.	2,983
Boyce & Co., Ltd.	2,975
Marchant, Hirst & Co.	2,800
H. Lawrence & Sons, 50, Brighton-road, Coulsdon	2,579

(Chief Engineer's estimate, £2,970.)

Fulham hospital and institution—

W. H. Cooper & Son	£3,600
Harris (Contractors), Ltd.	2,982
C. & T. Painters, Ltd.	2,864
A. & F. Polden, Ltd.	2,810
C. H. Boyd & Son, Ltd.	2,785
W. H. Gaze & Son, Ltd.	2,777
W. J. Marston & Son	2,695
Chas. Berger	2,650
*Sykes & Son, Ltd., 10, Essex-street, Strand, W.C.2.	2,477

(Chief Engineer's estimate, £2,775.)
(All of London.)

London.—Sub-station building at the Lillie-road recreation ground, for the Fulham B.C. Borough Surveyor:—
*W. J. Marston & Son, 87, Wandsworth Bridge-road, S.W.6 ..... £468

London.—New reinforced concrete jetty at Burntwick Island, River Medway, for the Poplar B.C. Borough Engineer and Surveyor :—

*Concrete Piling, Ltd., 28, Victoria-Street, London, S.W.1 .....£1,696

Macclesfield.—Reconstruction of the Ridgegate reservoir, for the T.C. Mr. Edward Hamson, engineer, Town Hall. Dr. H. Lapworth, consulting engineer, 25, Victoria-street, Westminster, London, S.W.1 :—

*Direct labour.
(Estimated cost £14,000.)

Manchester.—New branch bank in Altrincham-road, Northern Etchells, for the District Bank, Ltd., 15, Spring-gardens. Messrs. Francis Jones & H. A. Dalrymple, F. and A.R.I.B.A., architects, 178, Oxford-road :—

*Moston Brick & Building Co., Ltd., Manchester.

Manchester.—Sunday School in Holland-road, Chorlton-cum-Hardy, for Rev. G. Briggs, 1, Sidbury-road, Chorlton-cum-Hardy. Mr. M. Calvert Sunter, architect, 27, Hurstville-road, Chorlton-cum-Hardy :—

*W. Thorpe & Sons, Manchester.

Mansfield.—Further 20 houses for aged persons on the Ravensdale estate, for the T.C. :—

‡R. Moore & Son, Mansfield £3,580

Mansfield.—Extensions to the works at Rock Valley, for Messrs. Barringer, Wallis and Manners, Ltd. Messrs. Cook, Howard & Lane, architects, Brunt's-chambers, Leeming-street :—

Builders—*Greenwoods (Mansfield), Ltd., Mansfield.
Steelwork—*Geo. Sands & Son, Ltd. Nottingham.
Reinforcement—*British Reinforced Concrete Engineering Co., Ltd., Stafford.
Roof lights—*Halliwell & Co., Ltd., Brighouse.

Marple.—Extension of Council chamber at the Council offices, for the U.D.C. Mr. D. J. Diver, surveyor :—

*T. Reid, Ltd., High-lane, near Stockport.

Middlesbrough.—Parish hall at St. Martin's, on the Whinney Banks estate. Mr. Stephen Clarke, architect, Borough-road :—

*T. P. Price, Windsor-road.

Newcastle-on-Tyne.—Shopfitting work at Grey-street :—

*A. Edmonds and Co., Ltd., 91, Constitution Hill, Birmingham, 19.

Newcastle-on-Tyne.—Extensions to the Tankersville-terrace, High School, for the E.C. Messrs. Newcombe & Newcombe, architects, 23, Eldon-square :—

*H. Waller, Bk., Waller-street, Newcastle.

Newcastle-under-Lyme.—Sewerage scheme for the Council. Messrs. Wilcox and Raikes, chartered civil engineers, Stock Exchange-buildings, 33, Great Charles-street, Birmingham :—

Crawford Bros., Putney	£54,568 1 7
Currall, Lewis & Martin, Ltd., Birmingham	52,337 2 1
A. E. Farr, Westminster	52,000 0 0
J. G. Pearson, Dewsbury	51,880 0 0
Thomas Beighton, Chesterfield	50,404 13 11
A. Monk & Co., Ltd., Warrington	49,858 19 7
Edmund Nuttall, Sons & Co., London	49,238 10 0
Executors of P. Pemberton, decd., Tunstall	48,480 0 0
Thomas Vale & Sons, Ltd., Stourport	47,591 0 0
Fletcher & Co., Ltd., Nottingham	46,100 5 0
P. D. Hayes & Son, Stockport	45,448 2 9
Hayes (Stockport) Ltd., Sandbach	44,762 11 11
Bolton & Lakin, Ltd., Birmingham	44,643 14 3
Adam Eastwood & Sons, Warsop, Notts.	43,943 0 0
Thomas Bugbird & Son, Ltd., Leicester	43,220 0 0
Edward Taylor & Son (Bolton) Ltd., Bolton	43,066 11 10
Cameron & Pooley, Ltd., Birmingham	42,517 4 11
Lane Bros., Ltd., Mansfield	42,208 11 5
R. C. Crawford & Co., Ltd., Ormskirk	41,985 14 6
Reliable Roads (Shepshed) Ltd., Shepshed	41,750 0 0
Edcaster Ltd., Doncaster	40,714 8 2
W. Turner (Ardwick), Ltd., Manchester	40,336 0 0
Norwest Construction Co., Ltd., Liverpool	38,892 2 0
Sir William Prescott and Sons, Ltd., Tottenham	38,765 5 0
Henry Boot & Sons, Ltd., London	38,519 7 1
E. Earnshaw & Son (Ilkeston), Ltd., Ilkeston	38,215 10 11
G. Percy Trentham, Ltd., Birmingham	38,173 2 0
Hadephaltic Roads, Ltd., London	37,528 0 0
Hussey, Egan & Pickmere, Ltd., Birmingham	36,739 2 8
Andrew Blair, Lyell & Co., Birmingham	36,238 8 11

Newmarket.—42 dwellings, for the R.D.C. :—
Ashley, eight houses—

*T. A. S. Bennett & Sons, Letchworth	£2,100 0 0
Bottisham (four)—	
*A. E. Dowe, Cambridge	986 0 0
Burwell (six)—	
*T. Mortlock & Sons, Willingham	1,666 13 0
Fordham (eight)—	
*Mortlock & Sons	2,090 9 6
Isleham (four)—	
*H. J. Kidd & Son, Gazeley	1,145 0 0
Soham (four)—	
*Mortlock & Sons	1,042 0 0
Wicken (four)—	
*Mortlock & Sons	1,051 8 6
Woodditton (four)—	
*W. R. Southgate, Newmarket	1,140 0 0

Newton.—Pair of semi-detached houses at Newroad, Newton, near Porthcawl, for the Misses G. and M. Jones. Mr. J. Morris-Williams, L.R.I.B.A., chartered architect and surveyor, Porthcawl :—

*Bowen Brothers, Newton.

Northallerton.—Erection of Catholic Church in Thirsk-road, for the Rev. Louis H. Tils, "Lindisfarne," Thirsk-road, of the Sacred Heart, Malpas-road. Mr. F Spink, architect, Fairfield-road, Bridlington.

*F. Spink, Bridlington.

Northampton.—New Institute for St. Sepulchre's Church, for the Building Committee. Messrs. John Brown and A. E. Henson, F. & L.R.I.B.A., architects :—

E. D. Sharman & Son, Northampton.

Perth.—New offices, for the General Accident, Fire, Assurance Corporation, Ltd. Messrs. George Young & Sons, architects, 42, Tay-street :—

*Duncan Beveridge, 15, New-row, Perth.

Portsmouth.—New ward block at the Royal Portsmouth Hospital, for the Committee. Mr. B Wagstaff, secretary :—

*Frank Bevis, Ltd., Portsmouth £15,461 13 5

Preston.—Stripping and roofing shed, for the C.B. :—

*British Asphalt and Bitumen, Ltd., Preston £574 19 2

Preston.—Alteration to 27, 27a, and 27b, Church-street, for the T.C. :—

*J. Dillon & Sons, Preston £1,549 17 4

Rochdale.—Additions and alterations to the steam raising equipment and hot water installation at the Birch Hill Institution, Dearnley, for the Corporation. Mr. I. Clegg, Public Assistance Officer, Townhead :—

*G. N. Haden and Sons, Ltd., Manchester.

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Romsey.—Alterations at the Town Hall, for the T.C. Mr. A. J. Jenvey, Borough Architect and Surveyor :—

*G. F. Hurst and Sons, Cross Roads, Awbridge, near Romsey £79 11 0

Scarborough.—Additions to the infants' school at the Convent of the Ladies of Mary, Queen-street, for the congregation of the Ladies of Mary. Messrs. Jones & Rickaby, architects, 102, Westborough :—

*Jaram and Son, Scarborough .

South Bank.—Extensions at Crossbeck Convent, Normanby, for the Congregation of the Sisters of Mercy. Mr. J. H. Hirst, F.R.I.B.A., architect More's-chambers, Percy-street, Hull :—

*F. Hall & Sons, Hull.

Southend-on-Sea.—Alterations at the transport depot, for the C.B. :—

‡Rigg & Remington, Ipswich ... £1,751 3 8

Stoke-on-Trent. — Rebuilding the "Saracen's Head" public-house at Meir, for Messrs. John Joules & Sons, Ltd., brewers, The Brewery, Stone Mr. John S. Redman, architect, Stone :—

*J. Walters, jun., Stoke-on-Trent.

Sunderland.—Tennis and football pavilion with groundsman's hut at Wearmouth Colliery recreation ground :—

*Randle & Co., Back Dunelm-street, Sunderland.

Sunderland.—Rebuilding of the warehouse in Tavistock-place, for Messrs. Moores, Ltd. :—

*W. Milburn, Richmond-street, Monkwearmouth.

Tipperary.—Cottages, for the North Riding County Board of Health and Public Assistance Committee. Messrs. D. Heaney, B.E., Thurles; T. J. O'Meara, C.E., Nenagh, and Wm. Leahy, Thurles, engineers and surveyor :—

Birr No. 2 District (and part of Borrisokane).

Group "A"—11 cottages—	
*Gunning Bros.	£2,489 0 0
Group "B"—12 cottages—	
*T. Kennedy	2,571 0 0
Group "C"—10 cottages—	
*Gunning Bros.	2,280 0 0
Group "E"—11 cottages—	
*E. Raleigh	2,381 0 0
Group "H"—10 cottages—	
*Egan & Spearman	2,132 11 6
Group "H" 2—13 cottages—	
*Hassett Bros.	2,834 0 0

Nenagh District (and part of Borrisokane).

Group "N" 2—7 cottages—	
*J. Madden	1,610 0 0
Group "O"—12 cottages—	
*Hassett Bros.	2,700 0 0
Group "S"—7 cottages—	
*J. Hamilton	1,680 0 0
Group "V"—8 cottages—	
*Nolan Bros.	2,124 10 0
Group "W"—12 cottages—	
*Gunning Bros.	2,599 0 0
Group "X"—10 cottages—	
*T. Maher & Son	2,301 2 0
Group "Z"—8 cottages—	
*J. Shea	1,830 0 0

Thurles District.

Group "B" 1—10 cottages—	
*Duggan Bros.	2,400 0 0
Group "C" 1—8 cottages—	
*M. Purcell	1,863 0 0
Group "D" 1—13 cottages—	
*Duggan Bros.	3,510 0 0
Group "E" 1—18 cottages—	
*Duggan Bros.	3,978 0 0
Group "H" 1—10 cottages—	
*E. O'Connell	2,331 0 0
Group "I" 1—10 cottages—	
*F. Dwan	2,379 0 0
Group "J" 1—9 cottages—	
*M. Kennedy	2,093 0 0
Group "K" 1—10 cottages—	
*M. Purcell	2,268 0 0
Group "L" 1—10 cottages—	
*W. Fitzgibbon	2,590 0 0
Group "M" 1—9 cottages—	
*M. Purcell	2,482 0 0
Group "P"—11 cottages—	
*M. Purcell	2,505 0 0
Group "Q" 1—10 cottages—	
*M. Purcell	2,284 0 0
Group "R" 1—12 cottages—	
*M. Purcell	2,722 0 0
Group "S" 1—12 cottages—	
*M. Purcell	2,825 10 0
Group "T" 1—8 cottages—	
*J. Purcell	1,821 0 0

Tenders are to be re-advertised for Groups "D," 14 cottages; "F," 10 cottages; "F" 2, 26 cottages; "G," 14 cottages; "I," 14 cottages; "J," 10 cottages; "K," 22 cottages; "L," 16 cottages; "M," 12 cottages; "N," 14 cottages; "P," 5 cottages; "Q," 11 cottages, "R," 6 cottages; "T" 11 cottages; "U," 11 cottages; "V" 2, 9 cottages; "Y," 10 cottages; "A" 1, 10 cottages; "F" 1, 7 cottages; "G" 1, 10 cottages; "N," 11 cottages; "O," 7 cottages.

Sunderland.—New radiological block at the Royal Infirmary. Messrs. W. & T. R. Milburn, architects, 17, Fawcett-street :—

*E. Stafford & Sons, 5, Rudland-terrace, Hendon, Sunderland £10,00

Taunton.—Transformer sub-station at Silver-street, for the T.C. Borough Surveyor :—

*F. & E. Small, Taunton £308

Walsall.—Mortuary on the estate at Moat-road, for the T.C. :—

*Deacon & Boardman, Ltd., Walsall £2,455 10

Walsall.—Shops, showrooms and stores in Park-street, for Messrs. Mark and Spencers, Ltd., 72 to 80, Baker-street, London, W.1. Messrs. Norman Jones & Rigby, F. & L.R.I.B.A., architects, Williams Deacon Bank-chambers, Lord-street, Southport :—

*Bovis, Ltd., London, W.1.

Walsall.—Complete heating installation at the new Service Memorial Club, Vicarage-place, for the Building Committee. Messrs. Jeffries & Shipley, architects, King's-court, Bridge-street, Walsall :—

*C. Manton & Son, Walsall.

Warrington.—Shop, showrooms and stores in Sankey-street, for Messrs. Mark & Spencers, Ltd., 72 to 80, Baker-street, London, W.1 Messrs. Norman Jones and Rigby, F. and L.R.I.B.A., architects, Williams Deacon Bank-chambers, Lord-street, Southport :—

Builders—*Bovis, Ltd.
Steelwork—*Dorman, Long & Co., Ltd., Middlesbrough.
Leaded lights—*Luxfer, Ltd.
Steel ceilings—*Steel Ceilings, Ltd.
Stonework—*Empire Stone Co.
Casements—*Crittall's Manufacturing Co. Ltd., Braintree.
Asphalt—*Ragusa Asphalte Co., Ltd.
(Remainder of London.)

Warrington.—New elementary school on the Bewsey area, for the Managers of St. Alban's Schools. Messrs. Wright and Hamlyn, architects, 20, Winmarleigh-street :—

*J. Dolan & Son, Warrington.

Wayland.—Two houses at Banham (Crown-street) for the R.D.C. Mr. A. A. Comparts, clerk :—

S. Tennant & Sons, Watton £540
*C. Cordy & Son, Hingham 523

Wednesbury.—172 non-parlour type houses on the Park-lane and Mywod-road site, for the T.C. Mr. Arthur Booth, L.R.I.B.A., Borough Engineer and Surveyor :—

†A. C. S. Teece, Ltd., Building Contractors, King's Hill, Wednesbury £47,220 0 0

Wednesbury.—Alterations to King's Hill schools, for the T.C. Mr. Arthur Booth, Borough Surveyor :—

*J. Dallow & Sons, Birmingham £2,674

Whiston.—Eight houses at Kirby, six at Cronton and six at Halewood, for the R.D.C. Messrs. Gornall & Wainwright, architects, 17, George-street, St. Helen's :—

*J. W. Lee, Ltd., Chorley.

Whitchurch (Glam.).—Lavatory at Library-gardens, for the P.C. Mr. Monod Seymour, architect, Beulah-road, Whitchurch, Glam. :—

Monks & Co., Ltd., Newport	£292	0	0
Edwin Williams & Son, Whitchurch	268	17	6
Symonds & Co., Ltd., Cardiff	260	0	0
Shail & Son, Whitchurch	253	0	0
Howells & Co., Ltd., Caerphilly ...	246	0	0
Lewis Bros., Whitchurch	246	0	0
*Watts & Webb, Tywern-road, Whitchurch	228	0	0

Youghal.—20 houses—10 at Sea View site and 10 at Gasworks Field site—for the U.D.C. :—

Sea View :—
P. Kenneally, Building Contractor, Youghal £3,111 0 0
*Murray and Sons, Building Contractors, Youghal £2,952 13 5

Gasworks Field :—
P. Kenneally, Building Contractor, Youghal £2,753 0 0
*Murray and Sons, Building Contractors, Youghal £2,737 6 6

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